B ~~1 A 1925~~

App. F. IX-4

1925.

File No. 975-25

Previous References (C - V -)

Serial Nos. 1-7, 9-12, 21-30, 32-38

Later References

C.V 68-27 (1-2)
" 139-27 (1-2)

General and Revenue Secretariat.

Serial Nos.

Part B for Sept 27

SUBJECT

Manufacture of Serums in the State.

No 2623-S dt 13.4.27
from Dir of Agriculture
Complete this file.
Sr. Assistant.

Sanctions an Estimate for Rs 32,253 for

G. [illegible]. III-1] 191.

GENERAL AND REVENUE SECRETARIAT

(G.N.)

NOTES.

File No. 95-25

FILE HEADING.

Manufacture of anti-Rinderpest Serum locally

From

The Director of Hyde

No. Roc 1576 Dated 7.5.26 Received 11.5.26

Diary No. 5833] Enclos. Spare Copies. [Serial No. 1

BRIEF ABSTRACT OF LETTER.

poses The opening of a Serum producing Station in The State at an expenditure of Rs 15000 to 20000/- & requests permission to try the experiment of manufacturing Serum locally & to arrange with the Mukteswar authorities for the experiment

NOTES AND ORDERS.

1) The proposal seems to be a move in the right direction. If the experiment were to succeed it will keep down the cost of dealing with Rinderpest at a minimum. When compared with the Sum expended during the current year alone for calling

NOTES—First Sheet.

806

WD 01264—GPB—40,000—17-12-25

General and Revenue Secretariat

T. C. File No. 95 of 192 5.

Serial No

one lakh campaign against Anopheles (viz. over one lakh of Rupees) the Sum of Rs. 15 to 20 thousand Rupees asked for by the Dir. of Agre seems to be a small amount.

yes 2) The Dir. of Agre has not however furnished sufficient details as to how he has arrived at this Sum. He will, if approved, be requested to report the details of the Scheme, the details of expenditure etc.

3) The financial Dept. has to be consulted in the matter.

Sub for orders

4) The proposal is a good one. The Dir may be asked to furnish a detailed report on the following, among, other points :—.

Please see Dir's letter — 15 to 20, and reply.

3) i) Some details, even if approximate, of the estimated expenditure to be incurred by our Govt. on the experiment.

(1) ii) Some idea of the cost of the scheme, if it is started in Mysore, after the experiment should prove successful.

1) If Govt should favourably view the idea of this experiment it appears necessary for us to write to the Residency about the views of the Madras Govt to cooperate with us in the matter of the Govt of India to provide the Scientific staff.

2) The experiment is certainly worth trying.

See Agri 1) Should obtain if the A.S. will discuss the matter

NOTE.—Contn. Sheet

WD 01264—GPB—40,000—17-12-25
[App. F. III—2

Serial No

(6) It is not clear to me why or in what matter we should seek the cooperation of the Madras Govt. The Director's idea seems to be that if both Mysore and Madras men in this matter, the services of the expert staff will be given free thus limiting the cost to be borne by us to the amount required for buildings, cattle, labour &c which he estimates at Rs. 15 to 20,000. There is no reason to suppose that, if the Govt of India are prepared to give the free services of the expert staff to Madras, they will not extend the same courtesy to us. Even if we have to pay for these services, I do not think that the pay & that &c. of the Officers for such the Govt of India will exceed Rs. 10,000 for three months and it is well worth our while to incur this expenditure and have the results for ourselves. If successful this will be a source of profit.

I wished to get the exact facts & details on this point from the Director but could not find time to go to him myself. I shall do so tomorrow & submit it to other note. RR 13/5—

additional

(7) In other respects the Director's proposals are good & may be approved.

(8) The Finance will have to be consulted in the matter of providing the necessary funds. The Resident may be addressed after the question of funds is decided.

The Chief Minister

RR 13/5

DEWAN.

9693/14/5

DR 13/5

(11) This is a good scheme & the Govt of India may, I think be addressed if His Highness approves. There is no need to mix up the Madras Govt now. If we succeed in producing our own serum, we can invite to

NOTE—Contn. Sheet

Serial No

Madras Re selling Coorg & Theni.

15) I hope provision of about ~~2 lacs~~ 15,000 R can be made in the Budget for the purpose.

Lee 14/5/26

Dewan. PRJ 14/5

WG 14/5

16) I agree with Re Mr. Sastri sanction in the attached.

JM 15/5

17) Please put up a D.F.N & D.S.N thereon

PRJ 17/5

WG 17/5

18) Submit with a D.F.N. & D.S.N. for approval

JMSA 17.5.26

See Agn) WG 17/5

19) Please put up a typed copy as desired

PRJ 18/5

WG 18/5

Addl. Narasimhaiya - Please type the D.F.N. as desired by the Minister

PRJ 20/5

20) Submit with typed copies

JMSA 19.5.26

See Agn) WG 19/5

9947/20/5

21) Draft final note for approval

First member.

PRJ 20/5

22) Final Note Signed.

WG 20/5

Lee 20/5

NOTE—Contn. Sheet

Serial No

... OFFICE
22 MAY 1926
8.52

D.S.N. Jagannadha
Dewan.
21/5

WG
21/5

(2) I. Secy may h consulted as regards re provision of funds in revl. year's Budget.

JM
23/5

Finl Sec'y WG
concurs. PR
25/5

(3) The Budget for the next year was settled in the Council on the 22nd instant and the printing of of the estimates is well in hand. Orders of His Highness are awaited for issue of final print order. The Budget surplus according to the decision of the Council is Rs.43,000. At this stage, it may not be possible to provide a sum of Rs.20,000 for Serum Experiment. As provision has been made for development works such as Rural reconstruction, Town improvement etc. it is not likely that the Representative Assembly will ask for any large provision being made in the Budget for items of public utility. It is therefore suggested that if the scheme is considered worth undertaking, a schedule of demand may, ~~I think~~, be placed before the Legislative Council when the Budget will be taken for discussion by that Council

h
26.5.26.

10189
29/5 See Agn)
Finl Secy
Dewan.

WG 27/5
PR
28/5
WG 28/5

Notes—Contn. Sheet

WD 01264—GPB—40,000—17-12-25

Serial No.

...N'S OFFICE.
31 MAY 26
8760

x) The Dept has exceeded the ~~to~~ ministers budget allotment of 1,90,000 by ~~Rebate~~ about Rs 30,000 Rell as minuted in another file; & it is believed that if the Serum Experiment succeeds, the ~~Expe~~ Cost will be reduced most Considerably - perhaps to a fourth or fifth. It seems necessary to begin the Experiments as early as possible; & this Legs proposal to include this item when Subg the Budget to Legs Council may be appd.

(D.S.N. Mappl.) 29/5

RG
Dewan. 29/5-

WW 29/5

Sd appd
Jm
3.6.26

7

Final Note by the First Member of Council.

Subject:—

Opening of an experimental Serum producing Station in the State.

On account of the wide-spread prevalence of rinderpest in the State, the Government have been spending large sums of money for the purchase of anti-rinderpest serum which is required to immunise cattle - - against the disease. During the current year alone, a sum of Rs.1,90,000 was placed at the disposal of the Civil Veterinary Department for the purchase of serum and the Director of Agriculture has been urging for a further additional grant of about Rs.80,000 for the purchase of serum required for use during the rest of the current year.

With a view to minimise expenditure on serum a Bill to restrict the movement of infected cattle to healthy areas, was placed before the Representative Assembly last year, but the measure was not generally popular. Levy of fees for the inoculation of cattle was also prescribed with a view to recover at least a portion of the amounts spent on serum but it has been reported that people are not coming forward to get their cattle inoculated on payment of fees, mainly on account of poverty. For these reasons, the Department is handicapped in carrying on an effective campaign against rinderpest.

With a view to remedy this state of affairs, it was considered desirable to examine the question of manufacturing our own anti-rinderpest serum locally. If this can be done successfully, the cost of serum will be enormously reduced and we will be able to afford relief on a large scale to the ryot population. From the Director's letter of the 7th instant, it will be seen that it is proposed to carry on a preliminary experiment at a cost of Rs.15,000 to Rs.20,000 with the ultimate object of opening a serum-producing station in the State. The Director of Agriculture states that all the facilities for carrying on the experiment, viz., the necessary buildings, cattle and staff, can b

8

easily arranged for, at a small cost and that the scientific staff required can be obtained from the Government of India. He is hopeful that the experiment will succeed and I am of opinion that it is worth trying the experiment in view of the large benefits likely to be derived from it.

If His Highness is graciously pleased to approve of the experiment being tried, a provision of about Rs.20,000 may be made in the next year's budget for meeting the cost of cattle, buildings, labour, etc. The Government of India will also be requested, through the Residency, to spare the services of suitable scientific staff from the Muktesar Laboratory where the serum is being manufactured. It will be seen from the letter of the Director of the Imperial Institute of Veterinary Research that the Government of India are likely to comply with our request.

There is a suggestion in the letter of the Director of Agriculture, that we may combine in this matter with the Government of Madras. But in view of the comparatively small amount involved in the experiment, I am of opinion that we may proceed independently in the matter and thus have the full benefit of all the resulting advantages if the experiment should be a success.

K Meanday

Bangalore,
21st May 1926.

MEMBER OF COUNCIL.

Submitted to His Highness.

I submit herewith, for His Highness's gracious sanction, a Final Note by the First Member of Council on the subject of experimenting on the possibility of manufacturing anti-rinderpest serum locally at a cost of about Rs. 15,000 to Rs.20,000. I agree with him in thinking that the experiment is worth trying and accordingly solicit His Highness's gracious sanction to the proposal.

Fern Hill,)
2nd June 1926.)

Mirza M. Ismail

CSR.

C.V. 95-25

Record of Cases submitted for the Orders of His Highness the Maharaja.

Subject.

Experimenting on the possibility of manufacturing anti-rinderpest serum locally.

Order.

KRW
2/6/26

C Secy
M
4.6.26

Secy Legal Affairs
This may be submitted to the 2nd Member also as this should have been included as a scheduled matter
4/6/26

Please submit draft
to Dir. for the Holiday
12/6/26
7-6
WP 7/6

2nd Member.
4/6
WP 7/6
Secy 10.6.26

Serial No.

Subject: Civil Constructions.

Two dfts submitted for approval.

(First Mr) WG 12/15.6.'26.

10852/15/6

Appd. Please issue up to the Govt. before the Subject comes up in A.A.

16/9.

(Kind of secretary) 16/6.

WG 17/6

Issue at once

17.6.26

printed copies are ready. Orders are solicited whether the Govt. has to be placed at the disposal of the press.

Subject for orders. — Refer Paras 42+43

18.6.26. (See Agn) WG 18/6

Im[illegible] order :-

(Ordered unnecessary) WG 18/6

To the Fin. Br. for favour of communicating the Govt to the Comptr. & for taking action as per para 25.

18.6.26. (Fin Br) WG 19/6.

NOTE Contn. Sheet

WD 01264—GPB—40,000—17-12-25

General and Revenue Secretariat

T.V File No. 95 of 1925.

Serial No.

Agric Dpt
19/6/26.

4 9

For financial opinion, please see para 28: Draft & fair copies of C.C. Communicating Subst.

1943
19/6 SD The source has not been pointed out. May this be treated as a Supp! demand & placed before the Le at the next meeting

B
19/6

Initd dy) yes. plan
h
19/6.
By

INDUSTRIES & LABOUR BRANCH

Communicated No. C.X. 127 dy 19.6.26

2 To

The Director of Agn
in Comp. to this Le Secty
Nos. C. 25-26 dy 18/6.

Sanctions an expenditure of Rs. 2000/- for carrying on experiments for the manufacture of Serum in the State.

3 To

The Secretary to the Hon'ble Resident
Pol No. 1162 dy 21/6/26

Requests him to kindly move the Govt of India to spare for the Govt of Mysore the services of an experienced officer on a year's assistant from the Imperial Institute of Veterinary Research

Recommended

NOTE—Contn. Sheet

Serial No

for the period of about 3 months to carry out the experiment for ascertaining whether serum of sufficient potency can be manufactured in the State

4. From The Secy to the Hon'ble the Resident
No 7237 / 138-1926 d 20/8/26
States that the Govt of India will agree to the deputation for a period not exceeding 3 months on condition that the Mysore Govt bears all the expenditure in connection with the enquiry & that an estimate of expenditure involved will be communicated shortly.
Secretary's note on the letter:-
For perusal. Further communication may be awaited. The Dir. may be informed.
Sd/- R.R. 24/8
First Member & Dewan.
Sd/- V.V. 24/8
May thank
Sd/- K.C. 26/8.
The Director may be informed in the meanwhile
Sd/- M.M.I. 30/8
please do so
Sd/- R.R. 30/8.
Sd/- V.V. 30/8.

NOTE—Contn. Sheet

WD 01361 –GPB—40,000—17-12-25

General and Revenue Secretariat

C.V. File No. 95

App. F. III—2]

of 1925

Serial No.

A draft letter to the Dir. is put up
31/8/26

Please issue & submit with a draft letter to the Revd acknowledging with thanks, their letter.
31/8

5 To

The Director of Agn.
No. 2.T. 1574 of 25

With Reference to 2e (2) I state that the Government of India have agreed to the deputation from Mitcham of the necessary staff for a period not exceeding three months to investigate the possibility of manufacturing anti-Rinderpest & other Sera in the State on condition that H. H's Govt bears all the expenses in that connection. A draft letter to the Resdy is put up for consideration.
4/9/26

Urgent

Refce paras 5 & 8 above
Please type out as revised
7/9/26

Typed draft as revised is put up.
8/9/26

Dft for appl
Secy Agn)
4/9/26

Draft for approval.

First member.
10/9.
10/9

14/9

14/9.

NOTE—Contn. Sheet

Serial No.

6 To

The Secretary to the Hon'ble Resident
Pol 266 of 1879 126.
with Reference to recent Requests
him to convey to the thanks of His
Highness' Govt to the Govt of India
and add that His Highness' Govt
accepts the condition that they
should bear all the expenditure
in connection with the enquiry.
& that a further Communication in respect of
estimate of expenditure involved is awaited.

Sub A

7 From The Secy to the Resident
No. 9991/138-26 & 18.11.26.
With reference to N. 6 above, forward Copy
of letter No. 2092 - Agri & the 11th Nov. 1926 from the
Govt. of India, for information.

Subd. for perusal & orders. To experiment
on the possibility of manufacturing serum locally,
Govt. have accorded approval to an expenditure
of Rs. 20,000 & directed that necessary preliminary
arrangements be made therefor forthwith. The
Govt. of India were requested, through the Residency,
to spare the services of an experienced Officer &
a few assistants from the Imperial Institute of
Veterinary Research, Muktesar, for about 3 months
to try the experiment. The Residency intimated
in August last, that the Govt. of India will agree
to the deputation of the necessary staff from

NOTE—Contn. Sheet

WD 01229—GPB—37,500—1-9-26

General and Revenue Secretariat | C - V File No 93 of 1925.

Serial No.

Murkesar for the period, on Condition that the Bombay Govt. bears all the expenditure in this Connection & promised to send an estimate of the expenditure involved. ~~The Govt of India have seen~~.

The Director, Imperial Institute of Vety. Research, Mukteswar has now intimated through the Govt. of India & the Residency that the probable expenditure would be Rs. 3,500. (For details please see page 2 of the enclosure to the Residency Memo under disposal).

In this Connection, the Director, I.I. of Vety. Research Mukteswar States that he proposes to bring with him also the 2 Bombay Vety. Inspectors deputed to Mukteswar for training as they have had Considerable experience in the manufacture of anti-rinderpest & other Sera & the Director Considers this an opportune time for their return to Bombay. The Director of Agriculture has perhaps to be Consulted in this matter.

The Sum of Rs. 3,500 has perhaps to be debited to Rs. 20,000 Sanctioned for the experiment.

15.11.26. A reply seems necessary to the Residency approving to bear the expenditure & requesting to intimate the date of arrival of the Mukteswar Staff in Bombay.

15.11.26 A copy of the Residency communication may be sent to Dir of Agr, for return with remarks, immediately.

Then we may

NOTE. Contn. Sheet

WD 01225—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat

C.V. File No 95 of 192 5.

Serial No.

immediate.

write to the Resid^y accepting to bear the expenditure, as detailed in their letter- Sec^l. D.) WP 20/11

3265/23/11

The file maybe forwarded unofficially to the Dir^r of Agriculture for return with remarks

CRao 22.11.26.

1^st member) WP 23/11

The Resident may be written to at once accepting the Expenditure as per his Demi-official letter to Dir. No time to be lost

be 24/11

Draft at once CRao 24.11.26

WP 24/11

Draft Subd. 24.11.26

Dft for appl Sec^l D) WP 24/11

maybe approved CRao 25.11.26

First member) WP 25/11

3417/27/11

be 27/11/26 WP 27/11

Issue 29.11.26

NOTE. Contn.Sheet

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat

G.V. File No 95 of 1925

Serial No. 9

To

The Secretary to the Hon'ble Resident
Dol 941 dy 29/11/26.

With Reference to 2d (3) Sales Tax estimate amounting approximately to Rs 35000/- has been accepted and requested to intimate the probable date of arrival of the party in Bangalore.

To

The Director of Agri
No D 3767 dy 29/11/26.

Forwards copy of the above letter with copies of letters received with 2d (7). for info & necessary action

NOTE. Contn. Sheet

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat

C. V. File No. 95 of 1925.

Serial No. 10

From The Offg. Director of Agriculture

With reference to the Correspondence ending with this Office letter C.V. 34-26-2 (Flag A), forwards, for information Copies of letter from the Director of Imperial Institute of Vety. Research re Serum experiments in the Sabarmati & his reply thereto.

Secy's order on the letter:

"Put up ataree"

Ind. C.R.S. 25.1.27

Subd. with refees. The Director of Imperial Institute of Vety. Research Considers that it will be impossible to spare the necessary Staff from Muktesar for the Satisfactory execution of the preliminary work in the Colaba Cawnpore with Serum experiments in the Cold weather. The reasons for his Consideration are enumerated on pages 2 & 3 of the Director's letter. The Director has however no objection to Come to Bijapur in next March & during the next rains to make the necessary initial Survey & to work out the basis of a Scheme before deputing Mr. Hadaw.

The Director of Agriculture in his reply to the Director of the Vety Research Institute has requested the latter to visit Bijapur during the middle of January (?).

25.1.27

Subd for perusal. It would seem that the experiments can be undertaken only next cold weather.

Further report of the Dir may be awaited.

Secy D)

25/1

NOTE—Contn. Sheet

4525 20

WD 01229—GPB—37,500—1-9-26

App. F. III—2|

General and Revenue Secretariat

File No. 7

of 192 .

Serial No.

7924
26/1

DEWAN'S OFFICE
Received on
28 JAN. 1927
No. 53-77

Inspite of the protestations of the Dy. of Veterinary Research to help us, it does not appear that the Durbar Mahi's own starting a local factory in mysore with equanimity. The large receipts the Institute derives from the sale of serum in mysore has perhaps something to do with it—

CRR
26.1.27.

1st member)

VV
26/1

Please submit to Dewan.
The position may perhaps be mentioned to Resident.

RK
27/1

Submitted for perusal.

CRR 27.1.27

Dewan)

VV
28/1

I [illegible] for the [illegible]
[illegible]
I have [illegible]
a [illegible]
[illegible]

29/1

GEN. & REV. SECRETARIAT
10 FEB. 1927
DEVELOPMENT BRANCH.

DEWAN'S OFFICE
Received on
3 FEB. 1927
No. 5-797

OFFICE OF THE
THIRD MEMBER OF COUNCIL.
8 FEB. 1927
No. 137

Seen
8/2

VV 9/2

VV 29/27

Submitted to the Dewan with a draft letter to the Resident, as personally discussed

3rd Member for perusal VV 29/27 3.2.27

Note—Costa Shed Dewan's Office No 1919

22

Letter No.215-Agri., dated the 3rd February 1927, from the Officiating Deputy Secretary to the Government of India, Department of Education, Health and Lands, New Delhi, to the Hon'ble the Resident in Mysore.

---:C:---

Manufacture of serum in the Mysore State for inoculating cattle against rinderpest and other cattle diseases.

With reference to the correspondence resting with your letter No.10421/138-1926, dated the 2nd December 1926, I am directed to say that it was originally proposed to depute Mr. J.R.Haddow, the 3rd Veterinary Research Officer, Muktesar, to investigate the possibility of manufacturing anti-rinderpest and other sera in the Mysore State. At the time it was not anticipated that there would be any difficulty about making Mr.Haddow's services available. This however, has not proved to be the case, and as the cold weather is now well advanced, and Mr. H. Cooper, the only other Imperial Service Officer at the Institute besides the Director, has been granted leave for 8 months with effect from 1st April next, it is much regretted that it will not be possible at present to spare the services of Mr. Haddow who is in charge of the Izatnagar branch Laboratory where anti-rinderpest serum on a large scale is being manufactured. Mr. Cooper's leave does not expire till December next and it may not be possible to spare Mr.Haddow even during the next cold weather but a further communication on this point will follow after the Government of India have consulted their Agricultural Adviser.

---:C:---
"C O P Y"

REGISTRAR, RESIDENT'S OFFICE.

BJ

17 FEB 1927
No. 4603

WD 01229—GPB—37,500—1-9-26

General and Revenue Secretariat

G.V. File No. 9 of 1926.

Serial No. 12

To

The Director of Agri

No D 7082 of 22.2.27

In dealing with it is unlikely that the help of an expert from Muktesar for the manufacture of Sera in Lyallpur will be available even during the next cold weather, enquires whether a qualified man from the Dept. cannot be sent to the Govt. of India laboratories to learn the process of manufacture and to start a laboratory here on similar lines without the aid of an expert.

NOTE—Contn. Sheet

WD 01229—GPB—37,500—1-9-26
App: F. III—2]

General and Revenue Secretariat | File No. | of 192

Serial No.

(India Secy Mr Bhore's telegram & Dewan's D.O. letter enclosed.)

The question as to who shd prepare the serum for Cattle after the Experts' arrival has not been definitely decided; but the idea seems to have been to entrust the work to one of the Veterinary Officers.

Dr Parthasarathy tells me that in England the work is done by the Bacteriologist & not by the Vet man; that he had seen an Elaborate Scheme 3 years ago for preparing Cattle serum in Mysore; but that it was turned down by Dr Coleman on the ground that the climate is not suited.

I believe that after some one trained small Experiments can be done at Bangalore & also at a higher altitude within Mysore State; & subsequently a suitable Institute for preparing Cattle serum, Rabic Vaccine & Plague Vaccine can be set up either near Bangalore, or if essential at a higher altitude. The Military Farms (required for this) near Bangalore which cannot be put to a better use.

Dr P. said that it will take him at least 2 months to train his Asst who is quite a good man, & that he cannot go to Kolar then as the trained man has already gone to Kolar Dist as Health Officer.

The best plan will be to send Dr. Parthasarathy and a Smart Vet Officer.

The 3rd M. who is in charge of Agriculture has to be consulted.

10/3/27

Dewan with Compts.

NOTE—Contd. Sheet

D.O. No. 2175/Enc: 1.

25

Camp Koppa,

8th March 1927.

My dear Mr. Chandy,

Kindly see the enclosed telegram which I have received from Mr. Bhore, Secretary to the Government of India, Revenue Department.

It is in reply to my letter requesting permission to send a man from here to undergo training at the Imperial Institute, instead of waiting till their expert came here.

Do you think Dr. Parthasarthy may be sent with an Assistant Veterinary Inspector? My own view is that a trained Bacteriologist like Parthasarthy would be able to pick up knowledge better than anyone from the Veterinary Department and I believe he is to be in charge of the manufacture of the serum. It is necessary that he should go there. If you agree, you may kindly warn him to be ready to start. Further details can be settled after my return.

Yours sincerely,

Mirza M. Ismail

POSTS TELEGRAPHS.

192

26

O PH IMPERIAL SECTT THRO NEW DELHI 5 STE 35

MIRZA ISMAIL ESQ DEWAN OF MYSORE

BANGALORE

479-AGRI YOUR LETTER 24TH FEBY IF YOU DECIDE DEPUTE OFFICER TO IMPERIAL VETY INSTITUTE WE WILL ENDEAVOUR GIVE HIM ALL FACILITIES

BHORE

BY 195 22/

This form must accompany any enquiry respecting this telegram.

MGIPAh.—2-7-26.

EDUCATION, HEALTH & LANDS DEPARTMENT,
GOVERNMENT OF INDIA.

New Delhi, the 5th March 1927.

Dear Mr. Mirza Ismail,

Your letter of the 24th February. I enclose copy of the telegram which I have just sent to you. We shall do all we can to endeavour to spare the services of the head of our Institute as soon as this is possible for a visit to Mysore.

With kindest regards and best wishes,

Yours sincerely,

Amin-ul-Mulk Mirza M. Ismail, C.I.E., O.B.E.,
Dewan of Mysore, Bangalore.

No. [illegible] Agri.,

Government of India,

Department of Education, Health and Lands,

New Delhi, the 5th March 1927.

Telegram.

To

Mirza Ismail Esq.,

Dewan of Myosre,

Bangalore.

Your letter 24th February. If you decide depute officer to Imperial Veterinary Institute we will endeavour give him all facilities.

Bhore.

DEWAN'S OFFICE.
Received on
10. MAR. 1927
No. [illegible]

GENERAL AND REVENUE SECRETARIAT,

Bangalore, 15th March 1927

D.O. No. D 7850 / C.A.

Dear Dr Usmon,

I am directed to request you to see the 3rd member of Council tomorrow at 12.30 PM (in office)

Yours sincerely,

N Kanniah Reddy

He wishes to consult you about the deputation of an officer of yr Dept with Bacteriological training to Nuklear for learning serum manufacture

REPLY

(To be written on this margin.)

5720

Office of the Dewan of Mysore.

30

NOTE.

Dated 24th February 1927.

Special memo no 158 – Encls 2

The accompanying telegram, etc., is forwarded, with compliments, to the Secretary to Government, Development Departments. As already suggested by the Dewan, the question of deputing an officer of the Agricul Department to the Imperial Veterina Institute may be worked up at an ea date in consultation with the Direct of Agriculture.

By order,

J N Ramachandra

Private Secretary to Dewan

Dc Reminder issued. no. D 7203 dt 26/2

Send an immediate Dc reminder Letter already sent

25-2-27

OFFICE OF THE THIRD MEMBER OF COUNCIL 26 FEB. 1927 No. 793

Put to 3rd Member pperusal

25-2-27 26/2

Seen Chg

28-2-27

28/2

The Dir was requested to reply before 1/3. No reply is yet come. For orders with a reminder.

3/3/27. Issue 3/3

Issued no D 7333 dt 4.3.27

11/3/27

31

Bangalore,

24th February 1927.

My dear Mr. Bhore,

Many thanks for your kind telegram (as per copy enclosed) which I received to-day. I quite understand why it has not been possible for you to comply with my request. However, I am considering whether we may not depute one of our officers to the Imperial Veterinary Institute for a short period where he can learn the methods of serum preparation, as I find that our need for local preparation of serum is very urgent. I hope I can count on you to help me in giving facilities to the officer. Later on when the Institute can spare the Expert, I shall certainly be glad to have him visit Mysore and suggest improvements.

Thanking you for your kindness and with best wishes,

Yours sincerely,

(Signed). MIRZA M. ISMAIL.

"C O P Y"

32

Copy of Telegram dated 22nd February 1927 from the Hon'ble Mr. J.W. Bhore, Delhi, to the Dewan of Mysore, Bangalore.

368/Agri reference your personal letter of three Imperial Officers at Veterinary Institute. One is shortly going on leave. Impossible in circumstances to spare either of these left at Institute who alone can be of use for your purpose without serious detriment to our production of sera. Great regret inability to meet your wishes but as soon as opportunity offers assistance required will be given.

5360

33

G. R. S. III-2]

WD 2810—GPB—10,000—31-5-24

General and Revenue Secretariat

C.V File No. 95 of 1925.

Serial No.

15) I have spoken to Dr. Usman and Mr. Krumbiegel in the matter of the deputation of officers to the Imperial Veterinary Institute at Muktesar.

16) Dr. Usman is agreeable to spare the services of Dr. Parthasarathy who is now in charge of the Vaccine Institute and Mr. Krumbiegel has no objection to his deputation. As regards a Veterinary Officer to be deputed Mr. Krumbiegel has suggested the name of Mr. S.D. Achar, Veterinary Inspector.

17) Orders may therefore issue deputing Dr. Parthasarthy and Mr. S.D. Achar to the Imperial Veterinary Institute at Muktesar for learning the methods of serum preparation there.

18) Mr. Iswara Murthy who was till recently in the Vaccine Institute and who has now been posted as District Health Officer, Kadur District, may be recalled and posted to the Vaccine Institute in place of Dr. Parthasarthy.

The period of deputation & when these officers should join at Muktesar has to be settled in consultation with the Govt of India.

19) Please submit to 1st member & Dewan.

A file may be made to Govt of India as proposed. CRS 19/2/25

Dr. R. will be able to go only after University Exams are over.

Nov 20/2 CRS

9639 2/25

NOTE—Contn. sheet.

G. R. S. III-2]

341

WD 2810—GPE—10,000—31-5-24

General and Revenue Secretariat

G. V File No. 95 of 1927

Serial No.

DEWAN'S OFFICE.
Received on
26. MAR. 1927
Reg. No. 6849

[illegible] reports [illegible]
[illegible] Dy S. [illegible] Officer in
Charge of the V. Institute at
Munkdan may be appointed [illegible]
Member in Board [illegible]
[illegible] Rs [illegible]

DMc
28 3 27

Draft prepare

HK
28 3 27

3d Member

CBK
28/3.

Two other opts put up one, of a
letter of the officer in charge at Munkdan,
& the other a Dr. (to be signed by the
Dewan, if agreed) & the Hon'ble Mr
Blair. The file, after issue
of the G.O. & the opt of the Munkdan
Officer, will be sent to the GI
Branch for taking action & place
Mr Isvaramurti in charge of
the Vaccine Institute

3d Member)

HK
28 3 27

CBK
28/3

Hadley
with Compts)

HK
28 3 27

WP 28/3

Issue HK 28 3 27

28 MAR 1927
1480

NOTE—Contn. sheet

Serial No.

13 To

The Director of Agr.
and Senior Surgeon
and Comptr. Imp. Dy Lease.

WD 8279-87 of 28.3.27

Sanctions the deputation of Mr. P. Parthasarathi B.A.H.S., B.Sc., Asst. Surgeon and Mr. S.D. Achar L.V.B., Veterinary Inspector to Muktesar for learning the methods of manufacture of Sera for Rinderpest and other diseases and requests the Senior Surgeon to Relieve Mr. Parthasarathi as early as possible and submit proposals for the charge of the Veterinary Institute and also requests the Director of Agr. to submit estimate of the probable cost of the deputation on the lines mentioned

14 To

The Officer in charge of
Imperial Vty Institute, Muktesar

WD 8282 of 28.3.27

States that in conformity with the telegram received from the Hon'ble the Govt. there, the Govt. of H.H. have sanctioned the deputation of Mr. Parthasarathy and Mr S.D. Achar to Muktesar to learn the manufacture

NOTE—Contn. Sheet

WD 01229—GPB—37,500—1-9-26
App. F. III—2

General and Revenue Secretariat

G.V. File No. 95 of 192 5

Serial No.

of Sera for Rinderpest and other diseases of cattle and requests him to give all possible facilities and training to fit them for starting Serum manufacture and to forward Government with a programme of the course of study and training he would propose for these officers.

R/ deputation to Muktesar.

(W) (1) G.O.[illegible] Sd deputation of Messrs P Panthen Kenathy IMS, RSSe, & Sd Acken GBVC (2) letter to Offg Imp Vet Research Institute - Submitted for perusal after issue.

Draft of letter (to be signed by the Dewan) to the Hon'ble Mr JW Bhore, intimating deputation submitted for approval

Dewan)

29/3/27

Is it necessary to talk to Mr B. again with a letter? I think he said he might get in touch with Mr Mukherji.

30/3

3d Member)

30/3/27

Please peruse

31/3

[illegible] 31/3. 31/3/27

DEWAN'S OFFICE
Received on
30. MAR. 1927
Reg. No. 6932

1 MAR 1927
1553

NOTE—Conto. Sheet

Memo 875

11-4-27

POSTS TELEGRAPHS

374

NOTICE.

This form must accompany any inquiry made respecting this Telegram.

Charges to pay.

Rs.	As.

Office Stamp: MYSORE TEL. 10 APR 27

Handed in at (Office of Origin.)	Date.	Hour.	Minute.	Service Instructions.	Words.
Simla	9	16	20	Ste	24

Recd. here at 7 H. 10 M.

* Mirza Ismail Dewan Mysore

772/agri my Telegram march 12th director muddesai would prefer officers to join 15th april if possible -

= Bhore =

N.B.—The name of the Sender, if telegraphed, is written at

Karim Bux Bros.—Printers—Cal.—577—22-5-26

Serial No.

32)
Med & Dev. Leeks

Dr P. saw me & said that he has practical exam of Univ on 14th & 15th & he co leave only on 16th. This may be subd for Asst's info; & telegram sent to Mr Bhori from Dewan & also to Mukteswar Dir for Secy intimating probable date of arrival.

33) S.S. may be asked to telegraph to Mr. Ds. Mukti to join at once without joining time.

34) With approval of 3rd M. Dir of Agr. may be asked to direct the Vet Asst also to go with Dr.

35) The D.A. & deputn allowance shd be fixed in consultn with Dir Agr & a G.O. pass accdg. Usual Deputn allowance will be too little & perhaps 5 Rs adv for Dr P. & 3 or 4 Rs for Vet. will be necessary. Possible second class.

12/4

GO

(1) Please put up off & telegrams to Dir of the Insp Asst Mukteswar & the Attaches Blue.

(2) Off letter to Dr & agra.

(3) Consult FE Sec & about T.A. & deputation allce.

12/4/27 12/4/27 12/4/27

36) S.S. Bhowmik & correspdg papers & instructions immediately etc.
RB 12/4
Attended to

37) Please do this at once & RB 12/4 Attended to

38) After doing the two things refd to above please see us on 6th inst. for necessary
RB
Attended to. 12/4
Decided) RB 12/4

NOTE—Continue on Sheet

Serial No.

44 Draft of telegram sent to the Dir of Imperial Inst to Marktesar, on 12-/4/27 is put up below.

45 Draft telegram to the Hon'ble Mr Bhore (to be approved by the Dewan) & Draft letter to Dir of Agri. re Mr S. D. A chari are submitted for orders.

KHR 13/4/27

46) Sec'y D) WP 13/4

47) Issued WP 13/4/27

48) Please issue & submit WP 13/4

DEWAN'S OFFICE.
Received on
14 APR. 1927
Diary No. 8153.

49 To The Dir of Agri.
No D8749 dt 13/4/27.

States that Dr Parthasarathy leaves B'lore to Marktesar on 16/4/27 & requests to make arrangements to relieve Mr S. D. A chari so as to enable him to proceed along with Dr. Parthasarathy & calls for report of action taken

49 Submitted after issue.

KHR 13/4/27.

50 Dft telegram to the Hon'ble Mr Bhore, for approval. WP 13/4

Dewan) Issue WP 14/4

WP 13/4

13/4/27

*E—Contn. Sheet

App. F. III—2]

General and Revenue Secretariat.

File No. of 192

Serial No.

47 Telegram to the Hon'ble Mr Bhore was issued on 14/4/26.
As regards I.A & Def. allowance Please
See next page.

(H.H.)
16/4/27.

(P.T.O.)

NOTE—Contn. sheet

GPB—5,000—30-3-27

41

[redacted]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

Secretary

53 Dr Meiklejohn & the
Ter. Wire will do the
need advances.

54 The D-H. & deputy D-H.
allowances may be paid
one step fixed in Ensuch
with Fin Secy, & ~~the~~
suitable advances one step
Secretd at once so that
they may draw on Saturday
& leave on Saturday
for Portmt.

Lee
13/4/27

6706

GEN. & R... STAFF
13 APR 1927
DEVELOPMENT BRANCH

(only one Sheet)
GD

55 Submitted
RG
13/4

3rd Member
Hon'ble Secy

56. 13 4 27
Suitable amount
not exceeding D.A. admissible
Deputn allowance
may be
advanced 14/4/27

13/4.

FINANCIAL SECRETARY
4 APR
No. 5[illegible]

OFFICE OF THE
THIRD MEMBER OF COUNCIL
14 APR 1927
No. 2041

F: 3498-26
13.4.27

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

42

G.R.S. III—8]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

Mr. Rama Rao with Empts.

58 Re Muktesar, I do not know whether any S. IV. Subd. If not, this has to be done with Dewan's approval.

59 Please also draw Dewan's orders whether any ref to Residency need be made.

60 D.S.P. Legs he C.O. finds handing over only this evening, is not quite well & wishes to wants to take a privilege leave from Monday. In case ordered him to see Yr. D. Dewan permits him to leave on Monday, probable date I permit on that basis has to be wired to Muktesar & to Mr. Phoenix this and be a week later than proposed date, & will not. Phoenix much matter.

61 I am told that the Doctor who went to Study Leprosy is being paid by Rs ad an. Please verify & pick up G.O. Ref re D.A. & dep[n] allowance in consultn with Fin Sec[y]. Our men have to keep as family here & should not be one of pockets

Sec 6/12 Dev. Secy

16/4

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

G. R. S. III—31

To

REV. SEC'S

The Development Secretary
G.R.S.
Bangalore

Your Telegraph to the Director
Imperial Veterinary Institute
Muktesar united Provinces
of yours of the 12 inst. has been
forwarded to Reicimi.
Please Confirm.

From.
Telegraph Office
Bangalore

13/4/27.

A draft letter confirming the telephone referred to above is put up. It is for consideration whether orders on the letter received today from the Director of the Imp. Inst. Muktesar may be awaited before confirming the telegram.

(It has been decided that the mail for 16/4/27 should be awaited)

App. for perusal before issue
Sec. D)
14/4

D. No. 6731
Enclosure
Number.

Issue
14/4

N. B.—Should routine notes be written on small slips the notes must be copied, or slips pasted on this form.

WD 1880—G.G.B.—1,50,000—3.27

Secretariat 8871 Sl 17
dt 16.4.27

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat | GV File No 95 of 192 S.

Serial No.

63. A draft G.O. re ~~the~~ advance etc to one Sris Parthasarathy of S.D. Achar is put up for consideration.

~~HOD~~
16/4/27.

64 Dy, according to H Secy's opinion, sub for appl. or other orders (See 7 D)

UD 16/4

3rd M)

UD 16/4/27

66. After issue the file will be resubd for orders on the points raised in the first memorandum above.

UD

65. Please issue the Dy asked for by the Mr & resubmit.

UD 16/4

UD

16/4/27

Ref: Com 142-28 Dy

18.4.27

21.4.27

FINANCIAL SECRETARY
RECD
No. C.1...

66. Subd with draft for sanction.

Ref: Secy: has been considered
Please see para 56 of the Mtes

Dy 18.4.27

67 JA is proposed to be given the
authority to depute Sris allowance

68 For sanction

By
18/4

Dy 83 (1) Mem Communicated
Mr by Dy

NOTE—Contn. Sheet

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

Serial No. 18

To The Dir of Agri.
The Senior Surgeon
The Compt^r thro' Fl Secrt.

Directs that Messrs Parthasaratheyy & S.D. Achar be given deputation allowance under Art 555 S.R. & T.A. admissible under the rules and they may be given advances to the extent of the T.A. admissible to them, which may be adjusted out of the T.A. due to them.

2) Subd after issue Refd Para 64 + 65 above.

21/4/27

1) Refd Para 61. (First m's minute above) Subd for favour of opinion & suggns.

Thro' Sec^t. D. (H Sec^t).

21/4/27.

24/4/27

Paras 58, 59 + 60. (of the M's minute.) — Action will be taken on return of the file from the H Sec^t

21/4

Fd 3563-26
22.4.27

7^2 I showed the file to Lt Col [illegible] information (Verified) re the [illegible] Rs 10 a day. [illegible] Medical Officer at Secunderabad [illegible] duty there. — h 22/4/27

7^4 To the Medl. Section for kindly putting up the required refce.

7^3

22.4.27

NOTE — Contn. Sheet

The Imperial Institute of Veterinary Research, Muktesar,
P. O. Ritani, District Naini Tal, U. P.

No. 6731 Dated 11th April, 1927.

From

J. T. Edwards Esquire, D.Sc. (Lond.), M.R.C.V.S.,
Director,
Imperial Institute of Veterinary Research,
Muktesar.

To

The Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Departments, Bangalore.

Subject:- Training - Deputation of two students from Mysore

Sir,

I have the honour to acknowledge the receipt of your letter No. D 8282/b.v. 95-24-14 of 28th March 1927, intimating to me that the Government of His Highness the Maharaja of Mysore have sanctioned the deputation of Dr. P. Parthasarathy, L.M.S., B.Sc., and Mr. S.D. Achar, G.B.V.C. to Muktesar to learn the systems of manufacture of sera against rinderpest and other diseases of cattle.

2. Upon their arrival, I shall examine their capacities and then indicate to you the system of training I propose to give them.

3. Our most active period of serum manufacture, at Izatnagar, extends from the end of October until the beginning of April; during the rest of the year, the work is curtailed as far as possible. I take it therefore that we may extend this period of training if we deem it necessary somewhat beyond that stated in Major Simpson's letter No. 18971 dated 26th February last, so that they

have full opportunities of studying our methods of production.

I have the honour to be,

Sir,

Your most obedient servant,

For Director,

Imperial Institute of Veterinary Research.

K.D.P
8/4.

App. F. III—2]

(673)

General and Revenue Secretariat.

C.N. File No. 95 of 192 27

Serial No.

Subs

The main file was submitted to the Dewan yesterday for approval of the draft telegram to the Hon'ble Mr Bhore.

14/4/27. In Dewan's order, please see on the P.U.D.

14/4

Further communication referred to in Para 2 of the letter may perhaps be awaited.

yes-

18/4/27.

19/4

Subs B

3/4/27

GEN. & REV. DEPTTS.
SOUTH BLOCK
DEVELOPMENT BRANCH.

P.T.O.

NOTE—Contn. sheet

GPB—5,000—30-3-27

6706

App. F. III—2]

General and Revenue Secretariat.

C.V. File No. 95 of 1925

Serial No.

Medical file 33-26-(1-5) containing the order sanctioning to the Doctor who went to study Leprosy special a daily allowance of Rs4/- is put up.

KTO.
7-3/4/27

H. Scott

R:3563-26

76 Reference Para 72 of the R Regs.

GP.
23/4

77 The ~~spec~~ deputy officer was given an extra D.A. of 4 Rs ie he was allowed double D.A. but this was for Calcutta.

It is usual to allow only 1½ times D.A. in such cases

B2

Jcos)

78 As the officers deputed to Madras are given deputation allowance in addition to their usual T.A., the grant of Enhanced ~~Dai~~ Daily allee does not appear to be necy — h 25/4/27

79 Ref^e : Paras 58-61 of the First M^s minute : B2

FINANCIAL SECRETARY
25 APR.
No. [illegible]

Jcos

ned
26/4

NOTE—Contn. sheet

GPB—5,920—30-3-27

App. F. III—2]

General and Revenue Secretariat.

File No. 676 of 192

Serial No.

Para. 58.

No S.N. has been subd regarding the deputation of Dr Parthasarathi and Mr S.D. Achar, to Mukhtiar. Orders have been issued and the paper may now be subd for the gracious perusal of H.H.

Para 59.

No refce to Revisd seems necessary.

Para 60.

No further refce to the Hon'ble Mr Bhore or the Mukhtesar Authorities was necessary. (Please see Para 30 for the Dewan's orders).

Para 61.

80 The final Secy is not in favour of allowing any enhanced D.A (Daily allowance) to the Officers sent on deputation. (Please see Para 78 above).

81 Subd for perusal & orders.

Secy D) UD 30/4

1st Member)

82 Mr S.N. Mukerjee 2 5 27
for info & rtn. UD 2/5

83 I had hoped that Dewan's orders would be known to Govt before he left. The whole record has to be brought to his notice after his return

Mr 3/5

84 DSN. Please. 3/5/27
UD 3/5.

Urgent)

Urgent)

11296 3/5

NOTE.—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat.

6731 50
192

C.V. File No. 915 of 192 5

Serial No.

DEWAN'S OFFICE.
Received on
10. MAY 1927
Reg. No. 8615

OFFICE OF THE THIRD MEMBER OF COUNCIL
6 MAY 1927
No. 2367

85 A D.F.N. is put up for consideration.
9/5/27

86 D.F.N. submitted for approval
Sec'y D) 9/5

87 3rd Member) 5-5-27

88 [illegible] 6/5

89 Final Note signed by the Member is placed in the file.
7/5.

90 Put to Dewan with D.S.N.
7/5-27

91 A D.S.N. is put up. (S.N. submitted for signature)
9/5/27

92 Dewan) 9/5 9/5-27

93 Please submit to Dewan tomorrow morning. Parthasarathy Iyengar has come to see me (Sub. Secy. to D.R.M. has also come) Sub-S to Dewan
11/5

94 12.5.27 10/5

NOTE—Contn. sheet

GPB—5,000—30-3-27

Final Note by the Third Member of Council. 51

Subject :— Deputation of Dr. P. Parthasarathi and Mr. S.D. Achar to Mukhtesar, to study the methods of Serum manufacture.

In the Final Note dated the 21st May 1926 by the First Member of Council, it was stated that "the Government of India would be requested, through the Residency, to spare the services of suitable scientific staff from the Mukhtesar Laboratory where the (anti-rinderpest) serum is being manufactured."

As the Government of India informed us through the Residency that the services of the Experts at Mukhtesar could not be spared for the present, the Dewan was of the opinion that the matter should not rest there and that an officer from here should be deputed to Mukhtesar for undergoing training in their own laboratory, instead of waiting indefinitely till the arrival of the expert scientific staff from Mukhtesar. As the Government of India agreed to this proposal, the Director of Agriculture and the Senior Surgeon were consulted informally regarding the officers to be deputed for undergoing the said training; and on their recommendation orders have been issued deputing Dr. Parthasarathy, a trained Bacteriologist and Mr. S.D. Achar, a Veterinary Officer, to Mukhtesar for the purpose.

3. The connected papers are herewith submitted for His Highness' gracious perusal.

C S Balasundaram Ayr

MEMBER OF COUNCIL.

Bangalore,
7th May 1926.

52

Submitted to His Highness.

I submit herewith a Final Note by the Third *Member of Council on the subject of* the deputation of Dr. P. Parthasarathi and Mr. S. D. Achar to Muktesar to study the methods of serum manufacture, *for His Highness' gracious* ~~approval~~ perusal.

Mirza M. Ismail
Dewan.
12-5-27

153

Record of Cases submitted for the C
of His Highness the Maharaj

Subject.

Deputation of Dr. P. Part
sarathi and Mr. S. D. Achar to
sar to study the methods of seru
manufacture.

N.G.L.L.
12-5-27

97.0

95

Order.

~~KRM~~
16/5/27

96

97 file for perusal

11934/2075

1005/2075

1st Member 99
2nd Member 21.5.27

98 be

7515

54

Secret/Confl. File No. 95 of 1925

Serial No.

DEWAN'S OFFICE.
Received on
26. MAY 1927
Reg. No. 9867

100 Dr. Parthasarathy's letters to the 1st & 3rd members are put up. (Refce para 93 above)

101 Kindly refce is invited to para 59 & 83 above regarding the necessity of a refce to the Residency about the deputation of the Officers to Pudukottai.

25/5/27. 102 Secy D)

VS
25.5.27

103 Orders solicited (paras 59 & 83, 1st Min's minute) as to whether any refce to the Residency is necessary in the matter of the deputation of our Officers to Pudukottai.

Dewan)

VS
25-5-27

104 A refce is necessary strictly speaking, but we may dispense with it in this instance. I may, perhaps, mention this Resident informally.

105 May I have a copy of Dr P's letter to the first Member?

106 Please write & tell him not to feel discouraged, but to crumble his efforts to pick up

108 Office. Please make a copy
VS
27/5/27

NOTE—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat.

C. V. File No. 95 of 1925

Serial No.

as much knowledge as possible. It would be a great thing if he could succeed in manufacturing the serum here.

12265/28/5

107 (We may have some of Govt. of Ns assistance)

26.5.27

109 Subo

(1st Member)

27/5/27

28/5/27

110 Put up the copy wanted by the Dewan. Also, off to Dr Parthasarathy as ordered

28-5-27

111 A copy of Dr Parthasarathy's letter together with a draft reply for consideration are put up.

30/5/27. 112 Secy D

30.5.27

113 × Separately sent to the Dewan. 6/6/27.

114 Done

1/6/27

NOTE.—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat.

7515 56

G.R. File No. 75 of 1927

Serial No. 23

To

Dr P. Parthasarathy

D.O. No D. 10720 of 1.6.27 with reference to his (21 & 22), Requesting him not to feel discouraged, but to redouble his efforts to pick up as much knowledge as possible and also that Government consider it very necessary important that he should be in a position to manufacture serum in the State successfully unofficially

115 forwarded with compliments, to the Director of Agriculture with reference to his letter No. RVC 1576/H.C. 462-A 25-26 dt 11/4/27 with the request that the personal correspondence in the file may be treated as confidential and only meant for his information and that the file may be returned at a very early date.

By order

Mrs Ayyamuthammy

for Secretary to Govt

Development Dept

8/6

Copy & Typed

NOTE—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat. File No. 15 of 1924.

57

Serial No.

Returned with compliments.

Dr. Parkinson seems to have taken it that the "manufacture of serum only is ~~wanted~~ required to be studied by him though he mentions in his letter that standardisation has also to be taken up.

I am quite satisfied that the Veterinary Research Institute has had practical training in the manufacture, sterilisation and comparatively also the laboratory work connected with blending etc. It was chiefly for this laboratory work which deals with the correct testing of the serum as it comes from the Sterilising Room, with the X examination of the potency of each bottle, the correct blending of the different brews to secure uniform potency and the final examination & testing of the serum prior to issue. From his letter

NOTE—Contn. sheet.

WD 2298—GPB—10,000—4-5-27

General and Revenue Secretariat. File No. 7 of 192 .

Serial No.

I don't know on what grounds this fear is based.

Upon these Dr. P. was, [illegible], riding the high horse of a medical expert and alienated the sympathy of the Vellore officials (both the Dist. of the institute as well as our members) instead of tactfully getting at the association of the Laboratory work.

It was unfortunate that he was not sent here for instructions as he left for Kuttalam, as he knows how we envisaged his deputation and instructions issued which in reply may not reach it will be best to await his return, otherwise instructions on the above points may be sent him.

28.6.27.

OFFICE OF THE THIRD MEMBER OF COUNCIL
27 JUNE 1927
No. 3756

3d Member)

Seen. Since it is understood 27 6 27
that Dr P has returned from Kuttalam we may see what exactly has been done by him.

Sec B Till 10/7/27

NOTE—Contn. sheet.

WD 2298—GPB—10,000—4-5-27

28/6-27 28/6/27

POSTS & TELEGRAPHS

NOTICE.

This form must accompany any inquiry made respecting this Telegram.

Charges to pay. Rs. 15 JUNE 1927

GEN. SEC. DEVELOPMENT BRANCH.

TEL. 15 JUN.27

Handed in at (Office of Origin.) Ootacamund | Date. 15 6 27 | Hour. | Minute. | Service Instructions. | Words. 9 X 26

TO Reply Paid

Received here at 8 H. 58 M.

Many four
Cranady esqr Furlong Camp
mysore

123

am unwell direction prevents our returning please wire direction permitting acharn accompanying me letter follows = Parthasarathy =

N. B.—The name of the Sender, if telegraphed, is written after the text.

Kerim Bux Bros.—Printers—Cal.—849 (B-101)—20-11-26—40,000 Bks.

N. B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

Off of wire sent to Dr Kuttakrishnan

C.V. 95-2 8586 69

124

2.

DEWAN'S OFFICE
Received on
17. JUN. 1927
Reg. No. 9045

(Despt Secl)

15 JUNE 1927
No. 3444

15/6

Issued and sent

15/6/27

(1) Secl for personal effects arrn.
3rd mr)

16/6. 15/6/27.

1st mr)
Dewan)

12961/16/6.

17 9 lee 17/6/27.

16 6 27 16/6

17 6 27

17.6.27

18 6 27

NOTE—Contn. sheet.

WD 2298—GPB—10,000—4-5-27

8673

Mysore 15

DEWAN'S OFFICE
Received on
23. JUN. 1927
Reg. No. 9956

Dear Sir.

G.V. 9852-25-25

I thank very much for your kind letter communicating the desire of Government and encouragement. In writing the letter to the members of Government I wanted to keep them informed about the conditions here. I was not discouraged but was determined to learn the methods though obstructions were placed and facilities not provided.

I have now learnt the methods of preparation of serum in all its aspects so that we can prepare serum in the State.

As I have not been well since I came here and getting weaker and as there is no more information to be gained or obtained, I am leaving Mysore on 15th.

To The Chief Secretary
Government of Mysore

Yours sincerely
V. Bartholomew

Subd for perusal.
The letter is of 13/6/27
& telegram has been sent to him on 15/6/27 in reply to the ...

19/6/27

3d Member
Dewan

Subd for perusal
19/6
(See D)

OFFICE OF THE THIRD MEMBER OF COUNCIL
20 JUNE 1927
No. 3542

REV. SECRET
28 JUNE 1927
DEVELOPMENT BRANCH

No. 440

Enc.

DEWAN'S OFFICE.
Received on
28. JUN. 1927
Reg. No. 10110.

Office of the Sanitary Commissioner with the Government of Mysore,

Camp, Mysore, dated the 23rd June 1927.

From

B. Mahomed Usmon, Esq., L.M. & S.,
Sanitary Commissioner in Mysore, Camp, Mysore.

To

K. Ranga Rao, Esq., B.A.,B.L.,
General Secretary to Government, Camp, Mysore.

Sir,

I have the honor to forward for the information of Government, copy of letter dated the 13th June 1927 from Mr. P. Parthasarthi, reporting that he has finished his training in the methods of manufacture of serum and is returning to Bangalore.

I have the honor to be,

Sir,

Your most obedient servant,

Sanitary Commissioner, M.G.

A.N.M.

(3)

Letter dated the 13th June 1927 from Mr. P. Parhasarthi, to the Sanitary Commissioner in Mysore, Bangalore.

As per Government Order deputing me to have the methods of manufacture of serum. I learnt the procedure in all its aspects and I am convinved that I can prepare serum.

Since I arrived here, I have not been well suffering from still diarrhoea and there is no object in remaining here either in gaining or obtaining further information about serum manufacture. I am leaving Muktheswar on the 15th.

As I am not well, I may have to do the journey leisurely. If I am late in arriving at Bangalore, I request that you may be so good as to grant me permission to avail myself of casual leave for the number of days I may be delayed.

" C O P Y "

Sanitary Commissioner, M.G.

WD 91264—GPB—40,000—17-12-26

General and Revenue Secretariat

File No.

App. F. III—2]

of 192

Serial No.

135

Dental Surg was kindly consulted on this date by Mr P. who underwent the final course of treatment & completed his training at the Institute.

28.6.27

139 DSM RB 29/6. 30/6

35 140

DW Secretariat

1 JULY 1927

DEVELOPMENT BRANCH.

C.V. file 98-25 (24194) in which Dr. P. was asked to stay at Hukle Sar till medically advised to return is put up for [illegible]

Note Contn. Sheet

General and Revenue Secretariat. File No. 95 of 1927.

Serial No.

11th Subs for perusal of Secretary's minute. Two offrs are put up for appt. The Market, as last heard attended a fairly comprehensive course of training for the Parliamentary, & in the meantime that officer came away. He has, in his own opinion, "learnt nothing the procedure in all its aspects" and he is convinced he can manufacture serum. The point in connection is important It is necessary to have his corroborated if possible, both in view of the importance of the contemplated manufacture of serum, and of ascertaining how far the officer has justified his selection for this responsibility.

3d Member)

2 7 27

Issue

4/7. 4 7 27

5.7.27

26 TO The Dir. Imperial Vet Instt Muktesar

No D 86/CV. 95-25-26 dt 5/7/27

NOTE—Contn. sheet.

WD 2293—GPB—10,000—4-5-27

App. F. III—2]

D. 38 (66)

General and Revenue Secretariat. | C.V. File No. 95 of 1925.

Serial No.	
	Enquires whether Mr P. Parthasarathy underwent the full course & completed his training at the Inst te.
27	To The Dir. of Agri. No. D 87 dt 5/7/27. Enquires whether Dr P. Parthasarathy, who was deputed to Pusa has undergone the full course & completed his training at the Institute there.
	[illegible]
	[illegible]
	[illegible]

(17

App. F. III—2]

General and Revenue Secretariat.

C.V. File No. 95 of 1925.

Serial No.	
28.	To The Dir. of Agri. No 1910 dt 7/7/27 Requests the Dir to discuss the scheme put by him personally for steam treatment with the 3rd Member, Major Simpson, Dy Dir of S. D. Acharya Bhavnagar also being present.
29	From The Dir. of Agri. No Roc 1576/25-26 dt 8/7/27 Forwards the scheme referred to above & proposes to arrange steam in the virus Depot on an experimental scale.
	D.O. dt 8/7/27 from Mr. D. that he will arrange to go over on Monday (2 P.M.) for discussion with the Member in place of Col. S.
	3rd Member's note on the letter: Send for perusal. The refces will be put together & sent with a note of points for discussion on Monday.
	Sent to N.R. 8.6.27
	Sent to P.H.K. 9-6-27
	Yes please.
	Sent to C.S.B. 9/7/27.
	Sent to N.R. 9.7.27.
	Send with refces. C.V. file 99-26 in which reports as to the suitability of the ground made

NOTE—Contn. sheet.

WD 2293—GPB—10,000—4-5-27

.262

WD 01229—GPB—37,500—1-9-26

App. F. III—2]

General and Revenue Secretariat

C.V. File No 95 of 1925.

(65)

Serial No.

Kanwal Nain Ye servant apne for Service Certificate has been called for from the D.M.A. Agra. is likely to be [illegible] for ref[illegible]

11/7/27.

[illegible] 11.7.27

Dep Secy)

P.T.O.

NOTE Contn. Sheet

(69)

Serum Manufacture.

DEWAN'S OFFICE.
Received on
14. JUL. 1927
Reg. No. 507

153 Points agreed to in the meeting with the Director of Agriculture held in the Third - Member's Chamber on 12th July 1927.

.....

(1) Dr. Parthasarathi will be seconded in the Medical Department and put entirely on Serum manufacture for a year (till 30th June 1928).

(2) He will be Head of that section, which will be a section of the Civil Veterinary Department under direct control of the Director.

(3) The present staff under Mr.S.D. Achar, and the two Veterinary Inspectors who are now at Muktesar, will work in the Serum section under Dr. Parthasarathi.

(4) Director will be requested to furnish estimates for experimental work, on receipt of which orders will be issued for starting work.

(5) Dr. Parthasarathi to be treated as on duty with the Agricultural Department from the commencement of deputation.

(6) No further disciplinary action for coming away without permission beyond a reprimand.

OFFICE OF THE THIRD MEMBER OF COUNCIL.
12 JULY 1927
No. 335

OFFICE OF THE THIRD MEMBER OF COUNCIL.
15 JULY 1927
No. 393

Serial No. 30

From the Dir. of Agrl.
No Rve 1576/25-26 d July 25
fds an estimate for
Rs 31,853/- for manufacture
serum & virus during
3 months & requests/ref
to it-

Secy/s orders on the le
Ref ces please. May be
up & dft fds in corresp
ing orders & decisions and
al, in 3rd Hon (?).

Sent N.R. 16.7.25

Immediate. Sent P.H.K. 16.7.25

Sd with reference cesp
a dft l.o. for consideration
the sources pointed out
by the Dir has lapsed & a
additional grant has
be obtained for the purpo

The two Inspectors at
Muktesar who were sent
for a three years' course
from 1925 & who have
not yet completed the course
have to be recalled. The
advisability of recalling
them before undergoing the full
course is for consideration
the question as to why is put

NOTE. Contn. Sheet

WD 01229—GPB—37,500—1-9-26

General and Revenue Secretariat

C. V. File No. 95 of 1925. 71

Serial No.

Serum manufe till 30/6/28 but the manufe will be only for 3 months as now decided. Action re para 157 will be taken after the issue of the Aft order.

Hdl. 18/7/27

(1) We may say that Dr Pasricha's ruling will be on Serum manufacture Duty "until further orders"

(2) It may not be advisable to recall very top ofrs trpn the civil employ & training. The present staff working in the Kasauli Depot may manage for the present.

(3) Only a provision of Rs 30000/- for serum in the Budget of 1927-28, when Contingency Rs 1,89,507- have been passed. Rs is Rs 11,250/- still available. It may be known if a demand for Rs 20000/- more is made.

Aft A/c for approval

Dev Secy) 18.7.27

(1) Clean draft please

19/7/27

20.7.27

(2) Clean Aft is sent

Dev-Secy) 20.7.27

* Vide draft re recalling.

This message requires for getting advice regarding serum from Kasauli, as it will be necessary some time before new production is available

NOTE.—Contn. Sheet

457. (72

App. F. III—2]

General and Revenue Secretariat. | File No. of 192 .

Serial No.

(74) Dft (re Serum Operations) is subd for approval

H 7 27

3d Member through Gl Secy & Hl Secy

Hl 21.7.27

First Member (77)

H. Secy)

RR 22 7

Dft 27

(76) The P. P. is in the Public Health Depart. and has to be recorded in that Depart. instead of in the Medical Depart. as is proposed in the draft.

H Secy)

RR 23 7 27

(77) The decision as to all of costs does not provide for the pay of Mr. Parthasarathy. There is no provision made in the current year's budget for 'Virus production' &c. These items must be included in the calculation of costs of the Serum experiments.

(78) If taking all direct and indirect expenditure, the local manufacture is expected to be ~~unnecessarily~~ more economical than purchasing Serum from Muktesar, the proposals of the Director may be approved. The basic basis of the draft requires modification, as the amounts required to be voted by the L.C should include the two items referred to above.

H. 24.7.27

RR 24.7.27

NOTE—Contn. sheet.

REV. ERC

WD 0324 -GPB—60,0.0—24 5-27

General and Revenue Secretariat.

CM File No. 9 5 of 192 5

Serial No.

179) I have had separately (in a confidential corner) a report received from the Director of the Imperial Institute at Muktesar, which makes it very doubtful indeed if it would be wise to launch on serum manufacture with the officers we now have. The whole position has to be reconsidered as a wrong start would have far-reaching consequences, and might jeopardise the work so far done.

180) 3d Member Devan

27/7/27

27.7.27

181) The other file may be sent to me. I should like to meet him again & discuss the arrangements once more. I however think that the best course is to test the training so got by the P by actual manufacture of serum on a small scale testing it by comparison with serum obtained as usual from Muktesar. If everything is all right we may go ahead, & if not we may then take other suitable action.

182) CSJ 28/7/27

28/7/27

NOTE—Contn. sheet

WD 0324—GPB—60,000—24-5-27

74

Serial No.

Serum Preparation

DEWAN'S OFFICE
Received on
11. AUG. 1927
Regd. No. 1186.

7 AUG 1927
No. 994

Draft submitted for approval.

The matter may be disposed of by circulation, as informally agreed.

(The estimate was first revised by Mr Kenrick after personal discussion on 5. 8. 27) 6 8 27

3d Member)

Draft approved. 6/8

CSX
7/8/27

Chief Secy with compliments

8/8/27

Dewan) 8/8

It seems hardly probable or even possible that serum could be manufactured here successfully & the two officers deputed for training at Mukteswar have both come away in circumstances which reflected no credit on them & which curtail the full course of training. I am nevertheless in favour of making the experiment as meantime it is proposed to send Dr Dominick to Mukteswar to undertake any quality he may for this work, so that this in the event of Dr P. failing to make a success

NOTE.—Contn. Sheet

WD 01229—GPB—37,500—1-9-26

Serial No.

of the Ventas, Dr Domanch would be to take up the work with some hope of success.

JM 10-8-27)

For perusal & return

Leg. Dep. Dept

with compliments

NLL 11/8

Thanks, very much

NLL 12/8/27

CHIEF SECRETARY. 12 AUG. 1927

Chief Secy with compliments.

C.B

Circular.

NLL 12/8

(13) 13/8/27

(200) Final Note signed by the members is placed in the file.

1327 18/8.

Hy 18/8.

(101) S.N. Subd.

Dewan)

NLL 18/8

JM 20 1-8-27)

NOTE. Contn. Sheet

(For Disposal by Circulation)

No. C. 146

.....1927.-28

GENERAL AND REVENUE SECRETARIAT.

COUNCIL MATTER.

SUBJECT.

Proposals in regard to the manufacture of Cera for rinderpest.

CIRCULATED TO THE MEMBERS OF COUNCIL.

By Order,

.....13th August.....1927.

Chief *Secretary to Government.*

Extraordinary Member of Council.

1465/16/8 First Member of Council. I agree 17/8

912/17/8 Second Member of Council. I agree 17.8.27

1221/15/8 Third Member of Council.

WD 2670—GPB—1000—115-17

1322/18/8 2nd Member thro' Secy, Rev Dept. In favour of a fuel note DFR pr 17/8

17.8

Final Note by the Third Member of Council.

Subject :— Proposals in regard to the manufacture of Sera for rinderpest.

In my Final Note dated the 7th May 1927, I submitted for the information of His Highness that Dr. Parthasarathy, a trained Bacteriologist, and Mr. S.D. Achar, a Veterinary Officer, were deputed to Muktesar for the purpose of undergoing a training in the manufacture of serum, with a view to the opening of an experimental serum producing station in the State. These officers have since returned for certain unavoidable personal reasons, though without going through a full course of training as outlined by the authorities of the Institute. However, in the opinion of the Director of Agriculture, enough knowledge and experience have now been obtained to justify the starting of serum manufacture on an experimental scale. As had been foreseen, the need for expanding anti-rinderpest operations has been growing rapidly and it is important that no time should be lost in manufacturing serum locally with a view to minimise the cost of these operations. It is therefore proposed to start the manufacture of sera on an experimental scale, making provision, however, for expansion if the results prove satisfactory. Detailed proposals submitted by the Director of Agriculture in consultation with Dr. Parthasarathy were further scrutinised and carefully considered. They involve an expenditure of Rs.32,263 during the next three months; but a great part of this will be on structures and equipment of a more or less permanent character. The details of this expenditure are given in the draft Government Order which was approved by the Dewan and the other Members of Council on circulation and which is now submitted in the file for ~~the~~ gracious approval.

In order to place the work on an absolutely secure basis,

it is in contemplation to send two other officers to Muktesar for training, and proposals in this behalf will be submitted separately in due course.

C S Balasundaram

MEMBER OF COUNCIL.

Bangalore,
18th August 1927.

Submitted to His Highness.

I submit herewith a Final Note by the Third
Member of Council on the subject of Proposals in
regard to the manufacture of Sera for rinderpest,

.....

for His Highness' gracious approval.

Mirza M. Ismail

Dewan.

S.O.N° 49

Secret file 1933

THE PALACE, MYSORE,

August 26th, 1933

1934
S/9.

My dear Mirza,

Before I submit the file regarding the manufacture of sera for rinderpest, might I ask you to be good enough to instruct the Secretary concerned to clear up for me one or two points in connection with a matter that seems to teem with difficulties?

In the first place, the file does not seem to be complete. Neither the Director's programme of studies for the officers deputed nor his confidential report is forthcoming. These possibly explain what seems to be a modification of the opinion first held by you that the officers who returned from deputation so unceremoniously could not be useful for serum manufacture.

In the second place, I see that the object of starting serum manufacture locally is to save expense. On the other hand, I gather from the long letter of the Director which is in the file that the serum manufactured at Muktesar is issued at cost price and that the price is reduced on account of operations being conducted on a large scale, so that, though local manufacture would save the cost of carriage, the saving would be likely to be counterbalanced by the extra cost of manufacturing a comparatively small quantity. I don't find any data to show that the cost of a dose made in Mysore would be less than one obtained from Muktesar.

A third question seems to be whether it is possible, as a result of anything in the nature of a small experiment, to be certain that you can produce a serum that would be free from danger. There seems to be no doubt that you can produce serum, but I gather from the Director's letter that it is only after you have done that that the trouble begins. The serum so manufactured may contain germs of other diseases, and so be a source of grave danger, and it is only by a very expensive set

set of controls that you can avoid these. We all know of the appalling results that followed at Malkowal from the issue of plague serum that had not been properly tested, and it is only two years ago, I think, that a large number of cattle died as a result of the issue of a serum which had something wrong with it prepared in Muktesar. I write as a layman and recognise that it is possible that Mr.Edwards is over cautious. On the other hand I would venture to ask whether the question of controls is not one upon which it is desirable to secure the best scientific advice available before embarking on the experiment.

I hope you will forgive my asking all these questions. My first impressions after a very careful perusal of the file coincide with the note you have recorded as follows -"It seems hardly probable, or even possible, that serum could be manufactured here successfully by the two officers deputed for training at Muktesar but who came away in circumstances which reflected no credit on them and without undergoing the full course of training." And I find it difficult to understand what results you expect to obtain in the circumstances from an experiment conducted by these same officers.

Yours sincerely,

G Godfrey

Bangalore.

DO 1075-1/2 in file 6th September 1927.

My dear Sir Charles,

I have received your D.O. letter No.49 dated the 26th August 1927 regarding the manufacture of sera.

There is no doubt that great care is necessary in blending brews and standardising serum before issue; and that is why a medical man with Bacteriological qualifications is proposed to be associated with the Veterinary staff. It is true that our men returned from Muktesar before undergoing the full course outlined by the Director of the Institute; but they are not altogether new to the work, and it is hoped that with experience that the Department has gained in the manufacture of virus which we have been doing for quite some time past, the preparation of serum also can be successfully undertaken.

The object of manufacturing serum locally is, as you say, to save expense. The cost of manufacture here will be nowhere near what it is at Muktesar, and it is hoped that we shall be able to produce our own serum at about a third of the price we now pay for serum that we get from Muktesar. Our serum will also be of a higher potency. Without going into technical details, it may be stated broadly that the serum got from Muktesar is a blend of four brews prepared from blood obtained from treated animals, by four successive bleedings made at intervals of ten days. The brews obtained are in the decreasing order of potency. Here, it is intended to bleed our animals only once so that the brew got will be of maximum potency. Our cost of production will be further reduced as operations progress, by making satisfactory grazing arrangements for our cattle instead of resorting to stall-feeding.

Our scheme of work fully recognises the importance of control, and the appalling consequences of any defect in this part of the operations. The staff entrusted with the work is familiar with the precautions usually taken in the manufacture of virus,

and they are competent to secure scientific accuracy in their results. What is proposed to be done is to examine the animals before injection, to study the re-action after injection, to microscopically examine the brews during standardisation and again before bottling for issue. Our brew before it is issued will be tested on nine animals in graduated doses, and a preservative will be added during sterilisation which precludes all possibility of injurious germs getting in subsequently. In short, all precautionary measures now being taken at Muktesar will be adopted here also.

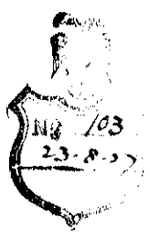
I send you the confidential reports of the authorities at Muktesar on the work of our officers who were sent there for study. It represents one side of the question rather strongly, and I might add it has been fully examined in detail and carefully considered before the present proposals were formulated. Steps are also being taken to depute 2 more officers - one a medical man who has specialised in Bacteriology and the other a veretinary officer - to go through a full course at Muktesar, but the experimental preparation of serum as proposed need not wait for the training of these.

It is very necessary for the vigorous conduct of cattle precaution operations on an adequate scale that we should produce our own serum without loss of time.

Yours sincerely,

Sd MS

Record of Cases submitted for the Orders of His Highness the Maharaja.



Subject.

Proposals in regard to the manufacture of sera for rinderpest.

143

Order.

~~KRW~~

9/9/27

10-9-27

457.

General and Revenue Secretariat.

46.

Papers in regard to the Manufacture of Sera for Rinderpest.

(*)

31. All urgent or confidential files returned with His Highness' orders may, in the absence of instructions or indications to the contrary, be ordinarily circulated to the Members of Council for perusal after the issue of orders.

33. The Secretaries concerned should see that orders in the cases referred to above are issued at once and that the files are returned immediately after to the Chief Secretary for circulation to the Members.

34. In all other cases, the files will first be circulated to the Members of Council at headquarters and then sent to the Secretariat concerned for the issue of orders.

Circulated to the Members of Council for perusal of His Highness' orders $\frac{\text{before}}{\text{after}}$ issue of orders.* (*Vide* Rules 31, 33 and 34 of the Subsidiary Rules for the conduct of business of Council in the Manual of Council Rules and Procedure)

Chief Secretary to Govt.

Through the Secretary to Government.
Devt. Department.

Issue off in the file 13.9.27 Issued subs.

2207 15/9.

FIRST MEMBER OF COUNCIL. 16/9

1496 16/9

SECOND MEMBER OF COUNCIL. 16.9.27

2351 17/9

THIRD MEMBER OF COUNCIL. 17/9

NOTE—Contn. sheet.

Mono WD 1190—GPB—500 9-1-23.

General and Revenue Secretariat. File No. 95 of 1927

Serial No.

H: Com 405

Draft and fair Communicating the Rlo. are submitted. (vide para 177 of the rules for the opinion of the Fin Secy)

GPS 14/15.9.27

215 PW 15/9/27

Communicated in H. Com 405 & 15.9.27

35 To The Dir. of Agri.
The Comptr thro' F.D.
The Senior Surgeon & Secy Comr.
No. D 2623-5 dd 13/9/27.
Sanctions the estimate for Rs 32,253/- for the manufacture of serum in the State as an experimental measure.

216 In para 157 the Deputy has ordered that the file may be resubmitted to him when the next increment of Dr Parthasarathy falls due. The Dir of Agri. has

x page 69 of the rules.

NOTE—Contn. sheet

WD 0324—GPB—60,000—24-5-27

(157 87

App. F. III—2]

General and Revenue Secretariat. | C.V. File No. 9 8 of 192 8.

Serial No.

2 by H

been requested, as per council decision d 4/8/27 to instruct D r p & m S. B. A. Chat not to sanction T. A. Bills for their journeys to & from Mukteswar etc. It is for orders whether any further action is to be taken on para 157.

KW 21/9/27. VS

27 DCWSecy) 21.9.27

118 I don't think any further action is necessary at present. Please bring up when Dr Parthasarathy's next increment falls due.

KW 23/9/27

119 As we have no information on file of matters for final examination taken from the Sanskrit examinations must the circular; opened up file a week earlier

23.9.27

120 Two offs to the Comptr are issued.

KW 23/9/27. VS Off Secy is for approval

23.9.27

DCWSecy)

Issue KW 26/9/27

27.9.27

NOTE—Contn. sheet

WD 0824—GPB—60,000—24-5-27

451 88

App. F. III—2]

General and Revenue Secretariat. File No. 95 of 1925.

Serial No.	
36	To The Comptr No D 3334 S/ 29.9.27 for copy of sc (34) for info &
37	To The Comptr No D 3335-S/ 29.9.27 Request him to refer for the orders of Govt the question of the grant of the next increment due to Dr. Parthasarathy of the Public Health Department
38	From the Comptr. No 15 G A D. dt 12/10/27 Acknowledges receipt of sl 37.

GEN. & REV. SECRETARIAT.
30 SEP. 1927
DEVELOPMENT BRANCH.

B

NOTE—Contn. sheet.

WD 0321 -GPE—60,000—24-5-27

87

General and Revenue Secretariat. | File No. Confdl | of 192 .

l 32.
from the Dir.
Imp'l Instte of
Vet. Research
Muktesar.
No 1511 dd 18/7/27
forwg info re the
training undergone by Messrs
P. Parthasarathy &
S.D. Achar.

Serial No. 1

The letter received from the Director of the Imperial Institute of Veterinary Research at Muktesar regarding the special training of - - Dr. Parthasarathy and Mr. S.D. Achar in the preparation of anti-rinderpest serum is submitted for perusal. It is a disheartening document to say the least.

The Director is emphatically of opinion that the minimum period required for (even rudimentary) training by a man possessing first class basic attainments is six months. The actual course of training which Dr. Parthasarathy and Mr. S.D.Achar underwent was one month and 22 days, and the - Director is of opinion that they cannot have gained a rational knowledge of the processes; and he states that he cannot guarantee for them any proficiency in the art of manufacture of rinderpest serum. He adds that their early departure prevented him from testing their attainments with a view to gauge them correctly. From the reports ~~of inspection~~ furnished by the officers entrusted with the ~~training~~ instruction of our men, which the Director encloses with his letter, it is seen that - - Dr. Parthasarathy was unable to attend several lectures. Dr. Parthasarathy in his letter to the Director, ~~himself~~ admits that he did not do research work on the Histopathology of Rinderpest

NOTE—Contn. sheet

WD 0824—GPB—60,000—24-5-27

General and Revenue Secretariat. | File No. of 192 .

Serial No.

as required. Mr. Haddow says that Dr. Parthasarathy did not seem very anxious to turn his attention to veterinary matters; and Major Stirling adds that he had no knowledge of Animal-pathology, that he was not keen on work in the post-mortem room, and it was difficult to get him to handle post-mortem materials. He adds that Dr. Parthasarathy did not seem to to gain any insight into the work of the laboratories.

3 In regard to the manufacture of rinderpest serum, Dr. Edwards regards it as "a source of never-ending anxiety" and Major Stirling whom he commends as an exceptionally shrewd technical observer, gives it as his conclusion that it would require a year's close study on his own part before he could become confident in this branch of veterinary science. Commenting on Mr. Krumbiegel's statement that he did not anticipate any difficulty in the actual manufacture of serum here, Major Stirling says that "this displays a scientific ignorance which would take years of instruction to dispel."

4 The correspondence enclosed by Dr.Edwards throws some light on the circumstances in which Dr. Parthasarathy and Mr. S.D. Achar took their hasty departure from Muktesar. Dr. Parthasarathy

NOTE—Contn. sheet

WD 0824—GPB—60,000—24-5-27

General and Revenue Secretariat. | File No. of 192 .

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was not in good health and the medical man who was asked to report on his condition could not say whether a change was absolutely necessary. In any case, Mr. S.D. Achar need not have accompanied him, if he did not get a letter from home calling him back. As Dr. Edwards (terse) puts it, "Dr. Parthasarathy left urgently on the plea of a grave internal malady, and Mr. Achar simultaneously received intimation of a distressing domestic calamity which impelled his immediate departure." Whatever the cause, first have not had value for the money spent on these officers.

3. It is a point for orders whether these gentlemen should not be sent back to complete their training at Muktesar before being entrusted with the serious responsibility of manufacturing anti-rinderpest serum here. The results of an error in operations of this nature would be widespread and deplorable.

MG

3d Member
Devawn

27/7/27

6 The report is discouraging but it is what might have been expected. As noted in the other file [CV 95 of 1925] the best course in the circumstances seems to me to be to try & manufacture the Serum on a small scale two or three times, & test it in

NOTE—Contn. sheet

WD 0324—GPB—60,000—24-5-27

Serial No.

comparison with the muktesar serum. If the results are satisfactory further manufacture can be continued, but if otherwise, Dr P may be sent back to the mkt Dept, due notice being taken of his conduct in this connection & Acharya or some other competent man sent to Muktesar for further training. ~~Such~~ He & the two men we have already made training may be able to do well after their return.

In the meanwhile the Director of the Lab^y may be written to thanking him for the report & his kind promise to render us all possible help in the manufacture of sera.

This report may be sent confidentially to mr Krumbiegel for perusal & remarks if any. I shall meet him again & have a talk as to the details after action proposed.

Dewan) 2/8/27

3/8/27

I take a very serious view of the Conduct of these two men who have brought nothing but discredit on the Dept. Some exemplary action is called for. The matter may be discussed in Council tomorrow. Director may be asked to attend.

3-8-27

WD 01229—GPB—37,500—1-9-26
App. F. III—2]

General and Revenue Secretariat | G.V. File No. 95 of 1925

Serial No. 10

There are two matters in this file, wh. have really to be considered independently.

1) The first is whether Dr. P. has learned enough to prepare serum successfully. On this we have to depend on our technical advisers, & on actual test, as suggested by the 3rd in. because this prepn is a close preserve of monopoly, ~~& who~~ which Institute ar wishes to keep exclusive, if possible. (vide last para of this letter) & hence we have to look at the matter, somewhat with the eyes of a competing business firm.

As regards their conduct in leaving Institute, ~~Explanations~~ explanations are necessary before action ~~can be~~ is taken. I may note, e.g. that Dr. P. had to come away in any case, having been summoned as a witness by the Court.

Re Dr Stirling's adverse ~~opinion~~ comments, I learn that our ~~were~~ were treated in a disrespectful fashion & that ~~what is called~~ "hot words" passed between Dr. P. & Dr. S. Per contra the Director says that he found both gentlemen to be very attentive & enthusiastic" — which is quite a different opinion.

4/8/27.

OF THE PRIVY COUNCIL
7 AUG. 1927
No. 993

Note—Contn. Sheet

General and Revenue Secretariat. | C.V. File No. 95 of 192 S.

Serial No. 33

To the Dir. Vet Service Mesopotamia
No D. 1658 d 11/8/27.

Expresses regret & hopes as to the conduct of the Officers deputed in returning without undergoing the full course & appreciates the assurance given re: assistance & states that further comm^n will be made early.

18 Submd for orders as to whether the Comptr may be addressed as to the stoppage of T.A. ordered in para 14 above.

KMG 12/8/27

19 Dep Secy) 14.8.27

20 Please prepare a d.o. to Dir Agr requesting him to instruct the officers concerned not to submit t.a. bills.

20/8/27 20.8.27

21 A draft is submd.

KMG 22/8/27

22/8/27

Dep Secy)

Issue

24/8/27

NOTE.—Contn. sheet

WD 0824—GPB—60,000—24-5-27.

Finished. No D 2160 d 25/8 Dep 24/8

47281

Telegraphic Address "Agri., Bangalore."
Code-5th Edition A. B. C.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

In reply please quote in full the Nos. and indicative symbol given below.

Bangalore,
7th May 1926.

From RCC. 1576/No. 25-26. 3 pages.

G. H. KRUMBIEGEL, Esq., F.R.H.S.,
Offg. Director of Agriculture in Mysore,
Bangalore.

To R. Ranga Rao, Esq., B.A., B.L.,
Secretary to the Government of Mysore,
Medical and Agricultural Deptts., Bangalore.

Sir,

I have the honour to forward for favour of consideration of Government, a proposal for the opening of a Serum Producing Station at Mysore.

In spite of my personal effort to organise an effective campaign against Rinderpest and in spite of the liberal support of Government, I have not achieved the results I hoped for, although the success gained in several directions is ample justification for the money spent. We have:

1) immunised for life some 40,000 of good cattle
2) organised efficient methods of producing our own virus
3) trained men who are now sought all over India, and
4) the prejudice of the ryots against inoculation has been entirely removed.

For want however, of Legislation for the control of cattle movement we have not been able to check the spread as much as we should have and the failure or inability of the ryot to pay the fees, naturally limits the operation and under these circumstances I see no finality.

As we are preparing our own virus I have ~~therefore~~ considered the possibility of manufacturing our own serum and I therefore addressed the Director of the Muktesar Laboratory, copies of which letter I enclose as also the reply of the Director.

It will be seen from the latter that Mr. Ware is quite in favour of such an Institute in South India.

I have personally no doubt of the practicability of the proposition.

The Muktesar branch station at Izatnagar where all this serum is being prepared is situated in the plains much better than Bangalore and a higher elevation is only required for storing the serum. Nandi Hill or the Bababudins will afford us all facility in this direction. Mr. Ware suggests a preliminary experiment in co-operation with Madras by which we would provide for buildings, cattle and menial staff and Government of India to supply the Scientific staff.

I think the proposed co-operation in conducting the experiment is very desirable though it is not perhaps adviseable or even practicable to comit ourselves regarding the working of the Institute itself if it materialises.

Regards the cost of the Experiment on our part, I think, I can arrange for the necessary building. Cattle also can be purchased in the same way as we do now for virus production. The menial staff can partly be engaged newly and partly be furnished from our existing establishment. The cost should therefore not be more than 15 to 20000 rupees and I think this would be money wisely invested, for if successful, the institute will not only save lakhs of rupees but this will be the only possible way of wholesale inoculation and finally stamping out of Rinderpest.

I therefore solicit the sanction of Government to the expenditure proposed above and permission to arrange with the Muktesar authorities for the experiment.

I have the honour to be,
Sir,
Your most obedient servant,

Offg. Director of Agriculture.

SRL.

D.O.No.Roc.1576/Hc.25-26 dated 6-4-1926 from the Director of Agriculture in Mysore, Bangalore, to the Director, Imperial Bacteriological Laboratory, Muktesar, Naini Tal.

While at Pusa I had a talk with Mr.Haddow on some points of preparing virulent blood for S.S.inoculation against Rinderpest. As you are aware from our orders for serum, we have been taking up the question earnestly. I have been rather disappointed in not getting any legislation through to prevent the movement of cattle which is all against our successfully overcoming the outbreaks.

We have inoculated since July last 34250 animals only, lost 29 which is extremely favourable. I hoped that once the people realised the permanent benefit of S.S.inoculation they would come forward and pay the fee we had prescribed. I have from the outset stopped all taking of virus blood in the villages so as to give no cause to --- objections and prejudice to the villager and our virus blood stations are working well, but it has taken practically all the serum which was sanctioned, to carry on free inoculations in order to demonstrate to the ryots the efficacy of the S.S.inoculations. I cannot expect Government to continue sanctioning such large sums indefinitely and our success in continuing this work and gradually get the people to pay, lies in the possibility of getting the serum at the lowest cost and I have been considering the question as to whether we could produce the serum here. I see nothing in the way of doing so provided some technical assistance can be got for the start. The climate is quite suitable, we can get plenty of cattle, our laboratory could easily be enlarged to suit the work and some of our men are under training at Muktesar and should I presume be able to assist in this work.

I should feel much obliged to have an expression of your opinion on the subject.

D.O.letter of the 23rd April 1926 from the Director, Imperial Institute of Veterinary Research, Muktesar to the Offg.Director of Agriculture in Mysore, Bangalore.

Ref.- Your D.O.No.1576/Hc.dated 6th April 1926.

1. I have been interested in the question of starting an anti-rinderpest serum producing station in the south of India for some

years past and I should therefore be quite pleased to help you in this matter if it were feasible. It appears to me that the first thing to do is to carry out an experiment either in Mysore or Madras to ascertain if a sufficiently potent serum can be manufactured there and for this purpose I think it would be necessary for an experienced officer from this Institute to visit the South of India next cold weather, and with your help and animals prepare to brew of serum which could then be put through the searching tests which are in ~~xxxx~~ vogue at this Institute.

2. If we were successful in producing a reliable serum by this means, I suggest that Mysore and Madras might cooperate in the matter for it would be of considerable advantage to both if the production of rinderpest virus and serum could be carried out as a routine in that part of the Peninsula. In this connection I might add that a short time before leaving Madras in the early part of this year I suggested in another connection that Madras and Mysore should cooperate in the fight against rinderpest, and of course one of our best weapons of offence would be the institute contemplated above.

3. Presuming that your Government would be willing to supply the animals (about 50), buildings, and menial staff for the experiment suggested above, I think it would be possible for me to obtain the sanction of the Government of India for deputing one of our Gazetted officers and a few assistants to the south of India for the period required for the experiment. I imagine that the whole thing could be completed in 3 months, and I shall be glad if you will let me know if there is any liklihood of such proposal going through.

No.Roc.1576/Hc. of 25-26 dated 29-4-1926 from the Offg.Director of Agriculture in Mysore, Bangalore, to the Director, Imperial Bacteriological Laboratory, Muktesar, Naini Tal.

Many thanks for your letter of 23rd instant. I am glad that you agree as to the advantage a Serum Producing Station would be to South India. I shall place the matter of expenses for an experimentas proposed by you before our Government and let you know in due course the results.

Do you think that Bangalore itself (3000') would do?.

"Copies"

Offg. Director of Agriculture.

SRL.

6

Proceedings of the Govt. of H.H. the Maharaja of Mysore.

Read -

Letter No.Poc. 157/H.C. 1881 of 25-26 dated 7th May 1926 from the Director of Agriculture requesting sanction to experiment on the possibility of manufacturing serum locally at a cost of about Rs.20,000/-

---

Camp

Order No. 27 25-26

18 June 26 Dated, Bangalore, 192

May this be

i Printed ? yes.

ii treated as a standing order ?

iii published in the Gazette. English Part ?

v translated ?

v placed at the disposal of the press ?

vi published in the Gazette, Kannada Part ?

As ordered on the above
18.6.26.

On account of the widespread prevalence of rinderpest in the State the Government have been spending large sums of money for the purchase of anti-rinderpest serum which is required to immunise cattle against the disease. During the current year alone a sum of Rs.2,28,000 was expended for the purchase of serum.

With a view to minimise expenditure on serum a bill to restrict the movement of infected cattle to healthy areas was placed before the P.A. last year but the measure was not generally popular. Levy of fees for the ~~inoculation~~ permanent immunisation of cattle ~~is~~ was also prescribed ~~to recover at least a portion of the amounts spent~~ to recoup expenditure in

amounting to about Half the Cost of Serum

as ordered by the

~~serum~~, but it has been reported that people are not coming forward freely to get their ~~ex~~ cattle inoculated on payment of fees. For these reasons the Department is handicapped in carrying on an effective campaign against ~~rex~~ rinderpest, in spite of the large amounts spent ~~over it~~.

As against an expenditure of Rs 2,28,000 ~~what was~~ only a sum of Rs 1612 was recovered as fees up to the end of March 46

With a view to remedy this state of affairs, the Director of Agriculture proposes to experiment on the possibility of manufacturing serum locally at a cost of about Rs. 20,000/-, with the ultimate object of opening a serum producing station in the State. If the experiment ~~were to~~ succeeds as is fully hoped by the Director, the cost of serum ~~is expected to~~ will be reduced very considerably ~~appreciably~~ and the Department ~~hopes~~ would be able to afford relief on a larger scale to the raiyat population.

In view of the large benefits likely to be derived if the experiment is successful, Government approve of the Director's proposal to try the experiment at a cost not exceeding Rs.20,000/- and direct that necessary preliminary arrangements be made therefor for this ~~at an early date~~.

~~In the meanwhile~~, The Government of India is being requested ~~separately~~ to spare the services of the required scientific staff from the Imperial Institute of Veterinary

Research, Muktesar.

Secy. to Govt Medl.& Agri.

To

The Director of Agriculture.

The Comptroller to Government,
through Financial Sectt.

ACH.

[PP. F. VI. 61.]

9

UBJECT.....

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.....

Section T.V

Diary No. of letter replied to .....

File No. 35.25

Serial No. 7

Secy.

T.V. No. 27

General and Revenue Secretariat

( )

the *192*

To

B. Sairinayagam Esqr Secy

Supdt. Br. Press, Uyarpe

Date of issue 18/6/26

Dear Sir

Signed by Mr. T.V.

I am desired to request you to be good enough to print 500 copies of the enclosed govt. order immediately & send the copies to the Jaffna Kachcheri before the meeting of the RA commences at 12 noon today, as copies are required for distribution among the members of the RA

Yours &c

W.

18/6

List of enclosures.....

Copied by.....

Examined by .....

over

WD 0562 GPB—31,000—17-8-25

1926

APP. F. VI. Gl.]

SUBJECT.....

.....

.....

Section Gv

File No. 95-25

Serial No. 3

No. Pol 1162

General and Revenue Secretariat

( ).

the 192

To

.....

Diary No. of letter replied to.....

Date of issue 21/6/26

Signed by Guts K. R. Rao

List of enclosures.....

Copied by.....

Examined by .....

over

If there be no objection,

an experienced officer & a few Boatmen from ~~the~~ about 8 months

~~the Board req~~ for ascertaining whether

15/6

All communications should be addressed to the Secretary to the Resident in Mysore, Bangalore, by designation and not by name.

09328

No. 7237 ENC. 138-1926.

REV. SECRETARIAT 12
21 AUG 1926
INDUSTRIES & COMMERCE BRANCH.

FROM

Major K. A. G. Evans Gordon, 1104

SECRETARY TO THE RESIDENT IN MYSORE.

I. & REV. SECTT. 21. UG. 1926 G. D SECTION.

DEWAN'S OFFICE. Received on 27. AUG. 1926 Reg. No. 1502

To

Pol. 226

The Secretary to the Government of Mysore,

Medical & Agricultural Departments.

Dated Bangalore, 20th August 1926.

Subject. C.V. 95-25-4

Manufacture of serum in the Mysore State for inoculating cattle against rinderpest and other cattle diseases.

SIR,

With reference to your letter No.Pol.1162/C.V.95-25-3, dated the 21st June 1926, I am directed to state that the Government of India will agree to the deputation from Muktesar of the necessary staff for a period not exceeding three months to investigate the possibility of manufacturing anti-rinderpest and other sera in Mysore on condition that the Mysore Government bears all the expenditure in connection with the enquiry. An estimate of the expenditure involved will be communicated shortly.

2245
25/8 Forpersusal & Letter Communicated
Mayb awaited
The Sec may kindly see
24/8 May thank
First Minister
Dewan.
26/8
24/8
26/8
26/8
Please do the
30/8
30/8

I have the honour to be,

Sir,

Your most obedient servant,

Major.

SECRETARY TO THE RESIDENT.

APP. F. VI. Gl.]

SUBJECT.....

.....

.....

Section C.V.

File No. 95-25

Serial No. 5

No. J. 1164 9/6/26 H H

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue 2-6-26

Signed by W. N. Mehta

To

The Dir of Agri

Sir, With reference to the last para of G.I. No. J-C-25-26/C.V. 95-25-2 dt 18/6/26 I am directed to state for your information that the Govt of India have agreed to the deputation from Muktesar of the necessary staff

List of enclosures.....

Copied by.....

Examined by.....

over

for a period not exceeding three months to investigate the possibility of manufacturing anti-rinderpest and other sera in the State on condition that H. H's Govt bears all the expenditure in that connection.

A further communication regarding ~~an estimate of the~~ estimated expenditure in this connection is awaited.

I have etc.

31/8/26

for Secy to Govt
M & A Depts

31/8/26.

No. Pol. 266 D
T.V. 95-25-6

15 15/9/26.

To

The Secretary to the Hon'ble
the Resident in Mysore.

Sir,

With reference to your letter No. 7237/138-1926 dated 20th August 1926 stating that the Government of India agree to the deputation from Muktesar of the necessary staff for a period of 3 months for investigating the possibility of manufacturing anti-rinderpest and other sera in the Mysore State, I am directed to ~~xixix~~ request you to be so good as to convey (to the Govt. of India) (the thanks of His Highness' Government) ~~for their favourable reference.~~

I am to add that His Highness' Govt. also accept the condition that they should bear all the expenditure in connection with the above enquiry. As further communication promised in respect of estimate of expenditure involved is awaited.

I have etc.,

9/9/26. 10/9,
Secy. Medl. & Agrl. Depts.
8/9/26.

ACH.

Letter No.2092.Agri., dated the 11th November 1926, from the Offg. Deputy Secretary to the Government of India, Department of Education, Health and Lands, Delhi, to the Hon'ble the Resident in Mysore, Bangalore.

Manufacture of serum in the Mysore State for inoculating cattle against rinderpest and other cattle diseases.

With reference to your letter No.6362-Misc/136-1926, dated the 23rd September 1926, I am directed to forward a copy of a letter from the Agricultural Adviser to the Government of India No.3/46, dated the 15th October 1926 and enclosures, regarding the expenditure likely to be incurred in carrying out experiments as regards the possibility of manufacturing anti-rinderpest serum in the Mysore State.

Copy of a letter No.3/46, dated the 15th October 1926, from the Agricultural Adviser to the Government of India, to the Secretary to the Government of India, Department of Education, Health and Lands.

Manufacture of serum in the Mysore State for inoculating cattle against rinderpest and other cattle diseases.

With reference to the Government of India, Education, Health and Lands Department endorsement No.1690, dated the 1st October 1926, on the subject mentioned above, I have the honour to enclose a copy of letter No.4308/IX-C-11 dated the 2nd October 1926 from the Director, Imperial Institute of Veterinary Research, Muktesar, giving a detailed estimate, amounting approximately to Rs.7,000/- of the expenditure likely to be incurred by the Muktesar Institute in carrying out experiments for the Mysore Government regarding the possibility of manufacturing Anti-rinderpest serum in that state.

Copy of letter No.4308/IX-C-11, dated the 2nd October 1926, from the Director, Imperial Institute of Veterinary Research, Muktesar, to the Agricultural Adviser to the Government of India.

Sera and Vaccines - Manufacture - Anti-rinderpest serum in Mysore.

Reference:- Your endorsement No.5795 dated 24th August 1926.

I have the honour to enclose herein detailed estimates amounting approximately to Rs.3,500/- of the expenditure that is likely to be incurred by this Institute in carrying out some experiments in Bangalore for the Mysore Government regarding the possibility of manufacturing anti-rinderpest serum in that State.

2. In addition to the staff enumerated in this list, I propose to ask the Director, Department of Agriculture, Mysore Government, if he will instruct the two Veterinary Inspectors who have been attached to this Institute for training since January last with the approval of the Government of India to proceed to Bangalore with Mr. Mundow and render him the further help which he will require. I have already been in correspondence with the authorities in Mysore regarding the recall of these two Veterinary Inspectors. Owing to the lack of staff it has not been possible to give them a detailed course, but they have had considerable experience in the manufacture of anti-rinderpest and other sera at this Institute, and I consider the present is an opportune time for their return to Mysore.

ESTIMATED COST OF EXPERIMENTS TO BE CARRIED OUT IN BANGALORE IN SERUM MANUFACTURE IN MYSORE.

	Rs.
Pay of Mr. J.A. Mundow, Third Veterinary Research Officer for 56 days.	1080
Overseas pay -10- (converted into rupees)	400
Railway fare on two trips to & from Bangalore.	1300
Waiting allowance for 24 days.	240
Contingencies	100
Pay of a Laboratory Subordinate for 60 days at Rs. 20/- per mensem	76
Railway fare to -do- to & from Bangalore.	85
Waiting allowance for 60 days at Rs.0-4-0 a day.	17
Contingencies	40
	3278

or say Rs.3,500/-

"COPY"

REGISTRAR, RESIDENT'S OFFICE.

By.

APP. F. VI. Gl.]

19

SUBJECT.....

.....

.....

Diary No. of letter replied to.....

Section C.V.

File No. 95-25

Serial No 9

No. Nol 491

General and Revenue Secretariat

( )

the 192

To

The Secy. to the Resident.

Sir,

Date of issue. C.V.95-25.7 2-9-11-26

Signed by. Dr V. Vedavyasachar

With reference to your Memo no. 9991/138-26 & 18th Nov. 1926, forwarding Copies of letter no. 2092. Agri & the 11th idem & its enclosures, received from the Govt. of India containing the estimate of expenditure likely to be incurred in connection with the experiment proposed to be undertaken by the Nurkhesar Staff for the manufacture of Serum in the State, I am directed to state that the estimate amounting approximately to Rs. 3,500 ~~refd. to in the enclosures mentioned above~~, has been accepted by H. H's Govt.

over

List of enclosures.....

Copied by.....

Examined by.....

WD 01265—GPB—31,000—24-12-25

2.0

2. I am to request you to let us so soon as to intimate the probable date of arrival of the party in Bangalore.

I have etc

24/11 Secy, DD

Memo no.

Copy of the above is forwarded, with Compliments, to the Asst. Director of Agriculture, with Copies of the Govt. of India letter & its enclosures referred to, for information & necessary action.

B. O.,

24/11 Secy. DD 25.11.76

24.11.26

Telegraphic Address
"Agri., Bangalore."

45635

4578

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

GEN. & REV. SECRETARIAT
25 JAN. 1927
DEVELOPMENT BRANCH.

No.Roc.1068-A of 25-26. 12 pages.

Bangalore,
January 20, 1927.

Encl. 9 s. 25. 10

FROM

G. H. KRUMBIEGEL, Esq., F.R.H.S.,
Offg. Director of Agriculture in Mysore,
Bangalore.

GEN. & REV. SECTT.
FR. D.
24. JAN. 1927
G. D. SECTT.

To

C. Ranganatha Rao Saheb, Esq., B.A.,B.L.,
Secretary to the Government of Mysore,
Development Departments, Bangalore.

Sir,

With reference to correspondence ending with your letter No.D.3229/C.V.34-26-2 dated 11-11-1926 requesting to submit proposals in connection with Serum Experiments, I have the honour to forward for the information of Government copy of letter No. 3047/ix.C.11 dated 10-12-26 from the Director of Imperial Institute of Veterinary Research and my reply thereto on the subject.

Put up A at once
EPR
25.1.27

I have the honour to be,
Sir,
Your most obedient servant,

Offg. Director of Agriculture.

dsr

This office No.D.O. nil dated 27th December 1926 to the Director, Imperial Institute of Veterinary Research, Muktesar.

I have your letter No.3048/1x.C.11 dated 10th instant together with the copy of your letter to the Agricultural Adviser to the Govt. of India. I am much obliged for the keen interest you have evinced therein in the matter of successfully carrying out our Serum Experiment. I appreciate all the reasons you state against hurrying the matter so as to ensure success. As matters stand, however, we have already made all arrangements by way of getting the necessary appliances, erecting shads and getting the required number of animals so that, as far as production goes, there is nothing in the way of proceeding. I note that you rightly lay stress on the necessity of Cool Storage. I have taken this fully in consideration in preparing the scheme. We have near Bababudan Hills which are 6,000 feet above sea-level ample opportunity of erecting the required stores and we have large grazing grounds at the foot of the hill where we intended keeping some herds of the required cattle and the Serum Station would finally be erected at that place. So far then as the proposed experiment is concerned, the difficulty as mentioned by you consists of two points (1) that your men cannot at present be spared and (2) you desire that you should come and investigate the case personally before any start is made, I appreciate as already stated the difficulties pointed out. But I am very anxious that the experiment should not be delayed if at all possible, for any length of time, which would probably mean to the cold weather next year. I am sure I am voicing the desire of our Government and feel extremely obliged to you if you could arrange to pay a visit to Bangalore, if possible, during the middle of January. You would then be in a position to decide whether with a short time deputation of Mr. Haddow and our men who are now under training, we could proceed with the experiment. I should greatly value your personal opinion and do not wish to proceed in any way without your assistance. At the same time, I equally feel whether we could avoid the delay which will greatly help us in getting on with the campaign against the Rinderpest. I therefore, once more solicit the favour of your paying us a visit in this connection.

Thanking

23

Thanking you in anticipation.

****
"C O P Y."

Offg.Director of Agriculture.

Copy of letter No. 3047/Ix.c.11 dated 10th December 1926 from Dr. J.T. Edwards, Director of Imperial Institute of Veterinary Research, Muktesar, to the Agricultural Adviser to the Government of India, Pusa, Bihar.

Subject:- Sera and Vaccines - Manufacture - Anti-rinderpest serum in Mysore.

XXX

With reference to correspondence upon the above subject resting with your office endorsement No.5795 dated 24th August 1926, and relative correspondence between the late Offg. Director of this Institute and the Offg. Director of Agriculture in Mysore direct, I have the honour to state that I have studied the position carefully, and regret to find that it will be -- impossible to spare the necessary staff from Muktesar for the satisfactory execution of the preliminary work in Mysore this cold weather without seriously straitening the prospects of carrying out the essential duties of this laboratory for some time to come.

I have come to this decision regretfully, for the policy initiated by the Mysore Government of unburdening the laboratory of the strain of routine serum manufacture cannot be regarded as otherwise than salutary. In the highest interests of the laboratory, and were the same action to be taken by other local authorities the attention of the staff could be restored ultimately to the performance of the functions for which it was created, namely, investigation into the nature and methods of control of diseases in India.

25

The reasons that have led me to submit this decision that operations on the part of my staff in Mysore during the present cold weather are impracticable are as follows:-

(i) I have at present only two Imperial officers on my staff, namely, Mr. Cooper, the Pathologist, and Mr. Haddow, the 3rd Veterinary Research Officer. Mr. Cooper has devoted his time entirely to essential technical duties other than serum manufacture, and Mr. Haddow is the only officer I have who can now have any pretentions to a rational knowledge of serum and vaccine manufacture, this in view of the fact that I have had him working in close collaboration with me during the last few years, within which period our present systems of simplified manufacture have been evolved. I have a number of officers of lower grade who could be entrusted to carry out the more manipulations, under control, but none can be spared readily even among them at this season.

(ii) It is only for some months of the cold weather season that we can manufacture serum of high quality. Much costly experience has taught us that with the onset of the warm weather and, later, of the rains, our serum inevitably deteriorates in potency, and this for reasons which are still the object of close study by us. We have thus to garner during the restricted good harvest season as plentiful stocks of good serum as we can, to lay up for the remainder of the year and blend with the poorer collections obtained at other times,

so that all sera for issue may be bottled with confidence in their efficacy. It was in this way that before I went on leave in March last I had taken great pains to lay up an abundance of good stocks so as to meet all likely demands during the period of my absence and until the advent of what we have called our good harvest period in serum (at Izatnagar).

(iii) Since I returned from leave to assume charge of the laboratory, three weeks ago, I have examined the condition of our stocks, in quality and quality, and I find that, although we are probably better situated than we have been very often in our past experience, serum-making must demand unremitting expert supervision on the part of our highest qualified officers for the few months that remain of the cold weather.

The process of serum manufacture, as it has settled down to be now at the laboratory, is exceedingly simple, when one examines the bare outlines of the directions given to the lower staff for its manufacture: in fact, it is published in my Annual Report for the year ending March 1925, and I am prepared willingly to forward to any one interested in the matter of a copy of the directions for manufacture as they have been still further amended in actual practice. However, it is my experience in discharging the responsibility of guaranteeing the potency of our issued products that the making of rinderpest serum for use in the different circumstances in which it is recommended is a source of never-ending anxiety. There was a time in the experience of the laboratory when the real value of a serum that was poor or even bad

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was not readily detected in the course of its use in the field. The only circumstances in which defects would become very noticeable were when the serum was employed for the serum-simultaneous inoculation, but for this purpose it was quite sufficient to have at hand minute "brews" of serum specially prepared under the immediate supervision of the Director of the Second Bacteriologist. It was in the season 1922-23 when numerous mortalities occurred by this method that there was revealed an inherent source of greatest danger in the system of manufacture until then employed. That experience, compared particularly with the magnificient work now done in Mysore, must be looked upon as a blessing in disguise, for it stimulated intensive research into better methods of serum manufacture, and the pioneer achievement of Mysore, where with some tens of thousands of animals have been safely protected with almost negligible mortality, must be accredited, to a very large extent, as a triumph for the serum now issued from this Institute.

Added to the exigencies of making a serum for the serum-simultaneous method there remains the massive work of making serum for preventive use, and we should be failing in our duty towards the veterinary services in the Provinces, where the preventive method is almost exclusively employed, if we did not endeavour to make this serum of the highest possible quality. With the increased vigilance of the local veterinary authorities information is communicated to us now from time to time upon the apparent efficacy or the apparent short-comings of the serum as manifested by its power to cut short actual outbreaks in the field. Still, it can be stated confidently that the serum, as issued for this purpose, is more uniformly good than it has ever been , and steps are now being taken to improve

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it further, so that, in fact, it is not far short in potency from that of the serum issued for the serum-simultaneous inoculation.

One very important provincial customer has complained that with the uniform charges for our "blends" of rinderpest serum he could see no reason why he should not invariably get the best blend, which we reserve for the simultaneous inoculation. As matters stand, we are hoping there will be no ground for complaint on this score, as our preventive serum is of the highest quality that can be issued on a large scale for the prices obtained, and, in fact, if it were not for the unusually large demands, the serum would be made, in its present potency, at a decided loss.

For the above reasons, that we are short of the necessary staff demanded for our own work, that this is a period of the year when all our available energies must be concentrated upon our own serum manufacturing work, and that unless this degree of attention is devoted to it we may be brought to task later for serious negligence, I venture to advise Government against undertaking the contemplated trial in Mysore within the next few months.

I must further, however, say that in the interests of Mysore a little more circumspection is needed before embarking upon a venture of the kind they contemplate. At present, the position, so far as we understand it, is this:-

(a) Some tens of thousands of cattle have now been successfuly inoculated in Mysore, with, it must be admitted, almost negligible loss.

(b) The serum used for this purpose, in considerable

quantities, has been obtained from Muktesar, where it has in reality been manufactured and sold at a price barely remunerative. The serum has been of a selected kind, for which a proposal has been put up to Government already to sanction an increase in price, distinctly above that applicable to our ordinary preventive serum. Until last year the income of the laboratory had always been less, and often most decidedly less, than the recurring expenditure, and in estimating the financial state of the laboratory much other expenditure in the shape of depreciation in buildings and machinery etc., was not reckoned. This adverse financial state of affairs applied particularly to years in which almost the whole of the expenditure was devoted to the manufacture of saleable products, the amount of research and other incidental work undertaken being very small. Even though during the last five years or so the amount of research work done here has been very large, it has been directed for the major part to the betterment of our serum manufacturing processes, and hence the expences incurred in connection with it we ought rightly to be set against our revenues from sale of sera.

(c) It is estimated roughly that unless the current demand for anti-rinderpest serum at this Institute comes close to about one lakh doses weekly we are not safely within the limits of self-support; and this in spite of (1) the accumulated experience of thirty years in the large scale manufacture of serum; (2) crude manufacture, (at Izatnagar) where serum producers (buffaloes) can be got and maintained as cheaply as anywhere in India; (3) testing, blending, and storage in the perfect climatic conditions of Muktesar, where the essential requisite of a good virus, obtainable from the local hill cattle, can be readily maintained for the work; and (4) the fact that the -- necessary chemicals, implements, and packing material are

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are bought in large quantities at rates which must be more economical than when these necessaries are bought in small lots.

(d) A real saving would be brought about, by local manufacture, in railway freight. I think, however, that the proportion freight charges bear to other costs in production will be found to be very small indeed.

I have no doubt that rinderpest serum can be made quite readily in Mysore, and that a serum station could be established there without much difficulty. We have every reason to believe that wherever buffaloes are found in abundance in India, the necessary serum producers are at hand. Again, the experience of Mysore has already obtained with its virus stations shows also that the necessary virus can be maintained for the work, and, in any case, if the intention is to repeat our methods of serum-making, the virus problem should not be one of much difficulty, for the amounts required are very small, and Muktesar could always come to rescue if the supply whould accidentally die out.

It was my intention again when the two Mysore Veterinary inspectors were deputed to this laboratory for a three years' course of training that they should emerge equipped with sufficient ratio al knowledge and practical ability to undertake work of the kind that it is meant by the management of a serum manufactory. A set systematic course of training therefore was laid down for them, but during my absence on leave unfortunately the scheme was kept largely in abeyance; I propose that for the next year they should resume their systematic training so as to leave the laboratory in a state of proficiency to undertake the superivision of

the serum manufacture if their Government so desires.

I submit therefore that it will be well for the Mysore authorities to prepare their ground further before they decide to commit themselves to the undertaking they have contemplated. It would be a most disconcerting setback to a fine piece of progressive work if they should be confronted with disasters with the use of their serum, through having hastily taken up serum making on their own. The list of materials and necessaries already furnished to them is most sketchy, and the only tangible result of a crude experiment carried out with this material and a small improvised staff operating in new surroundings would probably be that a minute brew of passable serum can be manufactured in Mysore. As I have stated before, we know that much already: but, the important consideration is how can stocks of serum be manufactured in Mysore, in quantities always adequate to meet the local needs, of uniformly satisfactory potency, and at an economic rate that justifies the local manufacture. If the system of manufacure is carefully thought out beforehand, there is no reason why there should be incurred a large initial outlay upon the station, for the technical needs of a station do not require much expenditure of money.

I have in mind that the experience of veterinary authorities in Africa in combating severe outbreaks in the field might be put forward in argument: the procedure often adopted by them is very crude, especially in comparison with that adopted at this Institute, and the serum obtained in this rough and ready manner seems to do the work expected of it very well. On reading the African reports, however, it seems that an accidental mortality which we would consider large and distressing

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in this country does not arouse anxiety, for the inhabitants do not regard loss in animal life incurred in this manner with the grave displeasure the people of India seem to display towards it.

I have said in the early part of my letter that anti-rinderpest serum manufacture, in reality, at any rate, with the living material we have available in India for producing serum is a source of never-ending anxiety, and it is still an exacting task, even though the extensive researches here in recent years have made it a simpler one, and one that is more easily controlled and more effective and economical.

Although I have desired to counsel prudence in this matter, I shall be ready always to assist the Mysore authorities to transplant our system of rinderpest serum making, as it has now become, into their territory if they still wish it. An undertaking of this kind can be satisfactorily accomplished only by a technical survey of the local resources: after preliminary examination of certain technical points I would raise by correspondence with the Mysore authorities, it would be advisable for me to proceed to Mysore(if my duties here permitted), probably, next March or during the next rains, to make the initial local survey: then, after working out the basis of a scheme, I would depute Mr. Haddow, probably with a suitable staff for the extended period of time during which it would be necessary to guide the local technical authorities, until they could be left on their own to carry out the work with safety.

I am sending a copy of this letter direct to the Offg. Director of Agriculture in Mysore, as he wishes to be advised early as to the time when the previously proposed party from Muktesar is to arrive in Mysore(his letter No.

33

1576-Hc.486 dated 24th November 1926). The situation, as I see it, is not one capable of ready solution in this way, and I am therefore submitting my views now upon it to you for transmission to Government, to act upon them in what manner is deemed fit.

Sd. J.T. Edwards

Do 1919.

7-2-27

(Dear Mr. Evans)

I write to request a kindness in the confidence that you will ~~oblige~~ me, if you can.

In Mysore, as in the rest of India, live stock is an important part of the wealth of the people and quite essential to successful agriculture. We recently started a campaign of protection against rinderpest, which is a pretty constant and serious source of loss, with serum obtained from Muktesar, and I may say that we have done very well so far. We have now educated rural opinion - which as you know takes a lot of educating - and hope to be able to make some very appreciable progress in this work. This is only possible if we can make our own serum. I understand that we have in Mysore favourable conditions for serum manufacture. We got a couple of our young men trained at Muktesar; but it is essential that we should not start except with expert guidance; and this, we were hopeful of getting from the Imperial Institute at Muktesar, through the kindness of the Government of India. We proposed that an expert officer should be sent down here to study our conditions and help us to make a start: unexpected difficulties seem to have come in the way of ~~a~~ compliance with our request. The Director of the Imperial Institute says that men cannot be spared till next cold season, which would mean ~~that~~ that work which we consider essential will have to be held up for a year, and that the impression which we have already

on it will ~~leave~~ have time to be efficed. I dare say there are difficulties; but I feel that they are not more than can be removed with kind assistance from you. If the Director or Mr. Haddow could be sent here sometime in February, we shall provide them with all possible facilities for enabling them to get - through their work quickly.

I would be greatly obliged if you could kindly use your good offices on our behalf.

(Yours sincerely)

Dewan.

To

J.A. Thorne, Esq., C.I.E., C.B.E., I.C.S.,

Revenue Member to

New Delhi.

A[illegible]F.VI G1.] 36 B650

SUBJECT

Section C.V.

File No. 95-26

Serial No. 12

No. D 7082 dt 22/2/29

To The Dir of Agre

Diary No. of letter replied to

General and Revenue Secretariat

( )

, the 192

Date of issue 22.2.29

Signed by [illegible]

Sir,

I am directed to state that it is [illegible] that the help of an expert from Pusa in the manufacture of dera [illegible] in Mysore will be available even during the next cold weather. To avoid the delay that would result from waiting for an Expert I am to enquire whether a qualified man from the Agl. Chemical can be sent to the Govt of India Laboratory to learn the process of manufacture and start a laboratory here on similar lines without

List of enclosures

Copied by

Examined by

over

the aid of an expert.

The matter may be kept

treated as very urgent.

Thence etc.

Dec 1851

17 7 21

17-2-17

APP[illegible]. VI. Gl.]

SUBJECT.....

.....

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Immediate 28

Section C.V.

File No. 95-25

Serial No. R

No. D 7203

To The Director of Agri.

Diary No. of letter replied to.....

General and Revenue Secretariat

(. .)

the 192

Dear Sir,

Please refer to this office letter no D.7084 C.V. 95-26-12 d 22/2/27. Will you kindly send up the proposals referred to therein before the 1st proximo?

Yours Sincerely

Date of issue 26.2.27

Signed by for V.V.

enquire whether a suitable officer from the Agri Dept could not be deputed for studying the process of serum manufacture in the Govt of India Laboratory at Muktesar.

List of enclosures.....

Issue

Copied by.....

26/2

Examined by.....

over

APP. F. VI. Gl.]

SUBJECT..... Groundnut 39

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Section C.V.

File No. 95-25

Serial No. 0

No. D 7333

Diary No. of letter replied to.....

To The Dir. of Agri.

General and Revenue Secretariat

( )

the *192*

Dear Sir,

No reply has yet been recd from you re: the proposals for the deputation of an officer ~~of the Dept~~ for studying the process of Lemon manufacture at Nuktesar, called for in this office letter No D. 7082/C.V-95-26-12 d 22/2/27 & in my D.O. reminder thereto d 26/2/27.

I am desired to enquire when a reply may be expected.

Yours Sincerely,

Date of issue 4.3.27

Signed by Mr. V.V. ~~Agm Dept~~

List of enclosures.....

Copied by.....

Examined by.....

WP

over 3/3

WD 01265—GPB—31,000—24-12-25

3/3/27

G.R..S VI G 34]

SUBJECT.....

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Section GV

File No. 95-25

Serial No. 13

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

, *the* *192*

Proceedings of the Government of His Highness the Maharaja of Mysore.

Read—

Date of issue 28.3.27

Signed by Mr. N.R.

• May this be

i Printed ?

ii treated as a standing order ?

iii published in the Gazette, English Part ?

iv translated ?

v placed at the disposal of the press ?

vi published in the Gazette, Kannada Part ?

Order Thereon No. D 8279-84 of 201

Govt are pleased to accede to the deputation of Mr. P. Parthasarathy K.M.S., B.Sc., Asst Surgeon and Mr. S.D. Achan, G.B.V.C. Vet. Hospital Bangalore for learning the method of manufacture of Serum for rinderpest + other diseases. This will operate by way of modification of G.O. No. V.34-26-4 27085-6 dated 23-2-27 so far as it relates to Mr S.D. Achan

41

Mr Parkinson is requested to prepare a programme of the course necessary at Muktesar in consultation with the authorities of the Imperial Veterinary Institute, and submit it to Govt through the Director of Agriculture.

The Senior Surgeon in Mysore is requested to relieve Mr Parkinson as early as possible and to submit proposals for the charge of the Vaccine Institute

The Dir. of Agr is requested to submit ~~for~~ ~~Provisional~~ estimates of the probable cost of the deputation, ~~& recurring~~ costs on the information available at present.

MK
28/3/27

To
The Director of Agriculture
The Senior Surgeon
The Comptroller
thro H. Lett
copy to Medical Secretary

CSK
28/3

List of enclosures.

On receipt of the info called for the Govt for sanctioning the extra cost will be provided and an additional demand will be placed before the L.C. if necy

Copied by h 28/3

Examined by MK

WD 1888—GPB—1,000,00—21-12-25

Communicated H. Com. No 6 Dated 29/3/27

App.F.VI G1.]

B650

Not to issue

SUBJECT

Yr Dft. pr cable of Dec 29

31/3/27

Section

File No.

Serial No.

No.

To The Hon'ble Mr J W Bhore

Diary No. of letter replied to

General and Revenue Secretariat

( )

, the 192

Date of issue

Signed by

List of enclosures

Copied by

Examined by

Thank you very much for yr telegram no 479-Agri dated the 5th March. We have decided to depute two officers Dr P Parthasarathy LMS, B Sc, and Mr S V Achar G/B V C - to Muktesar and they will be going there end of next week immediately. I request you will kindly ask the Imperial Officers at the V & Y Institute to afford these gentlemen all possible facilities, and give them the training fit them thoroughly to take up the manufacture of sera in India. Your experts may

over

(3)

be requested to prepare a programme
of training for our officers.

Thanking you once again
for yr cordial helpfulness in
this matter, & with kind regards,

Yrs sincly

App.F.VI-G1.] B650

SUBJECT .....

46

Diary No. of letter replied to .....

General and Revenue Secretariat
( )
, the 192

Date of issue 28.2.27

Signed by .....

List of enclosures .....

Copied by .....

Examined by .....

Section G.I.

File No. 95-25

Serial No. 14

No. D 8282 (Conf I)

To The Officer in charge of the Imperial Vety Institute Mukteswar

Sir,

I am directed to enclose copy of a telegram recd from the Hon'ble Sir J.W. Bhore by the Dewan of Mysore, and to state that the Govt of H.H. the Maharaja of Mysore have sd the deputation of Dr P. Parthasarathy, L.M.S., B.Sc, and Mr. S.D. Acker G.B.V.C. to Mukteswar & learn the manufacture of sera for rinderpest and other diseases of cattle. I am to request you to order be so good as to receive these officers into your Institute and to give them all possible

over

facilities & training to fit
them for starting German
manufacture.

I am further to request
You to be so obliging as to
favour this Govt with a programme
of the course of study and training
You would propose for these officers

I have etc

Lt Col D D

App. F. III—2]

General and Revenue Secretariat.

File No. of 192

18

Serial No.

Draft Telegram to the Director of Imperial Institute, Muktesar.

My letter March 28th Stop Mysore officers arrive there about 22nd April.

Development Secretary.

12/4/27

Issued on 12/4/27.

NOTE—Contn. sheet

GPB—5,000—30-3-27

APP. F. VI. (1).

SUBJECT..... Commercial .....

.....

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Section C.V.

File No. 95-25

Serial No. 15

No. 18749

To

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue..... 13.6.27

Signed by..... M.V.V.

The Dir of Agri.

Sir,

I am in continuation of Govt. No. D 8279-81/C.V. 95-25-13 dt 28/3/27 sanctioning the deputation of Dr. P. Parthasarathy & the S.D.A. clerk to Muktesar for learning the methods of manufacture of Sera for rinderpest & other cattle diseases, I am directed to state that Dr P.P. Parthasarathy is leaving Bangalore to Muktesar on the 16th inst & to request that arrangements

over

List of enclosures.....

Copied by.....

Examined by.....

WD 01265—GPB—31,000— 24-12-25

50

May kindly be made
to relieve me S.D.A. Chair
so as to enable him to
~~so that he may~~ proceed to Nuktesar
along with Dr. P[illegible] Asaratthy.
I am to state that
separate orders will issue
re his T.A. & Deputation
Allowance.
A report of action taken may
be sent for the info[illegible] of
Govt. Have etc.

Deputy Secy.
13/4

13/4/27. No D 8750 dt 13.4.27

Copy to Senior Surgeon in Mysore

13/4

App. F. III—2]

General and Revenue Secretariat.

2 dft

57

K V File No. 95 of 192 5-

Serial No.

Draft Telegram to the Hon'ble Mr. Bhore, Delhi -

your telegram 9th April. stop -

Director Muktesar has been wired that Mysore officers arrive there about 22nd April.

Dewan.

Subject appd

Dewan)

12/4/27

12/4 12/4/27

13/4/27

WD 13/4

Issued on 14/4/27.

NOTE—Contn. sheet

GPB—5,000—30-3-27

APP. F. VI. Gl.]

SUBJECT..... page 5 n

..... for ge.(16) vide

..... for ge.(1)

Section C.V.

File No. 95-25

Serial No. ~~47~~ 17

No. 2[illegible]

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue.....

Signed by.....

Director Imperial Veterinary Instt. 15 Muktesar

My letter March 28th Stop Mysore officers arrive there about 22nd April

Devel I/

Secretary.

List of enclosures.....

Copied by.....

Examined by.....

To

The Director,
Imperial Vet. Instte
Muktesar.

Sir,

I am directed to hereby confirm the marginally noted telegram sent to you on 12/4/27

I have etc.

14/4
for Dev. Secy.

over

G.R..S VI G 34]

53

SUBJECT..... Issue of Remonit-

.....

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Diary No. of letter replied to.....

Section C U.

File No. 95-2

Serial No. 18

General and Revenue Secretariat

( )

, the 192 .

Proceedings of the Government of His Highness the Maharaja of Mysore.

Date of issue 16/11/27

Signed by Mr V.V. Char.

Read— (1) c. No. D 3279-8

C.V.95-25-13 d 28/3/27

Sanctioning the deputation of Mr P.P Parthasarathy & Mr S. D. Ach to Muktesar for learning the methods of manufacture of Se for rinderpest & other diseases.

Order Thereon No. 8873-5 d 16/11/

Govt are pleased to direct that the above two officers be given 3 Advance to the extent of the

May this be

i Printed ?

ii treated as a standing order ?

iii published in the Gazette, English Part ?

iv translated ?

v placed at the disposal of the press ?

vi published in the Gazette, Kannada Part ?

a def allowance admissible to them under Rl. 55 M-S.R. during the period of deputation.

2. They will be allowed to draw T.A. admissible to them under the rules.

T. A. ~~allowable~~ admissible 87 to them under the rules may be given to them to meet their travelling expenses. These endorsements should be adjusted out of the T. A. due to them.

WH 15/4 Dept Secy

WH 15/4

To The Dir of A[illegible]
The Senior Surgeon
The Comptr Central Secty.

Copy to G. H. Branch.

16/4/21.

List of enclosures.

Copied by

Examined by

WD 1868—GPB—1,000,00—21-12-21

PROCEEDINGS OF THE GOVERNMENT OF HIS HIGHNESS
THE MAHARAJA OF MYSORE.

55

R e a d:-

Government Order No.D.8279-81-C.V.95-25-13 dated the 28th March 1927 sanctioning the deputation of Mr.P.Parthasarathy and Mr. S.D.Achar to Muktesar for learning the methods of manufacture of Sera for rinderpest and other diseases.

O R D E R NO. D.8873-5/C.V.95-25-18

Dated, 16-4-27 Bangalore.

Government are pleased to direct that the above officers be given a deputation allowance admissible to them under Art.55 Mysore Service Regulations, during the period of deputation.

2. They will draw Travelling Allowance admissible to them under the rules.

3. Advances to the extent of the Travelling allowance admissible to them under the rules may be given to them to meet their travelling expenses. These advances should be adjusted out of the travelling allowance due to them.

Sd. N. Rama Rao

Secretary to Government,
Development Departments.

To

The Director of Agriculture in Mysore,
The Senior Surgeon in Mysore,
The Comptroller to Government, through Financial Secretariat

7072

Bangalore,
22nd April 1927.

56

My dear Rama Rao,

I wanted to look you up, but I was thinking of something else as I was passing by your room. The First Member asked me as to what has been done regarding his note in respect of Dr. Parthasarathi's deputation to Muktesar, his halting allowances etc. I told him it was being worked up in your Secretariat. He seemed interested to know in what stage the matter was. I thought I would just mention this to you so that you might submit this file for his information.

Yours sincerely,

R. Ramachandra.

Asst Secy for Rev— taking the file of the 1st Member.

22/4/27

22/4 Seen the M/r with the file. (The main file was to it with may be awaited)

23/4

3rd Interview
D'Cruz (after the)
with Comptr.

OFFICE OF THE
THIRD MEMBER & COUNCIL
9 MAY 1927
No. 3046

Mr. Chaudy.

I had another interview with the Director Mr. Edwards yesterday, as he was not available till now as he was otherwise busy. The interview was a long one nearly ~~[illegible]~~ an hour and a half. He asked what we were doing. I told him that we have been going round the institute and seeing all branches, collection of snakes etc. Then I asked him about the work we came here for and the duty we have to make here, he started giving us long sermon discouraging us to take up the task of serum manufacture. "You can be happy with the medical work for which you are trained and if I were you I will fight shy to take up the work" to use his own words. He says if My Govt. wants to manufacture Serum it is too premature, the first thing to do is to buy and increase the demand in the state for some years. All his talk has been to create fear in me so that I may not take on myself the onerous duty as he calls it. Further he said he would Communicate with the Govt. directly about the time and training one has to get. The period he wants to suggest is

6/5/27 Memorandum No. 2515-OBX 6/5/27 1-5-27 Mukherjee 5/7 Dem. Member 5/5 Dewan for perusal OBX 7/5/27 Tel. G.S. 26-22 7/5/27 G.S. 7/5/27 10/5

same years. From what I have observed, there is no systematic training given. One has to learn whatever that comes in one's way. As a matter of fact what is learnt by the veterinary Inspectors here is what is to be learnt by laboratory attendants. The present attitude of the Director is also partially due to one of the gentlemen who have been here whose name I do not want to mention. Because Mr. Edwards while talking to me yesterday, told me that he enquired about me from one of the inspectors whose name he mentioned and that he was told that I had somewhat of a medical training. On the first interview day I told Dr. Edwards all about me and that I worked under Dr. Ledingham of Listin Institute.

Yesterday evening the veterinary Inspector whose name was mentioned by Mr. Edwards came to me, having known that I had seen the Director and asked me what the latter told me. When I questioned him whether any body questioned him about us, he replied that nobody noted and that he did not talk to any body about us.

The secret is that the Director does not want us to start the manufacturing of serums. My stay in Muktesar for one week and going through every

59

known about any work is done matters me believe there is not much to learn. I have collected till now all the informations available as the work is now carried on. What I have yet to gather in this place is the standardisation of steam which they have not done since I arrived here. After obtaining this one have to stay in Yelahanka for some time. This is the substation of the Artillery where part of the work is done.

If I am permitted to ~~buy~~ have a say in the matter, I suggest that no action be taken as soon as the Directors letter is received. While the correspondence is going on I shall gather all the facts and informations. I shall leave the place when all the informations are collected and when I feel confident that I can do the work in Bangalore. I am sure I will not take more than two months to gather all the informations in this place as the work done is very little. As soon as I return to Bangalore experiments may be done to see whether steam can be produced under the

Imp

conditions of Bangalore.

I apologise for taking the liberty of writing this letter. I felt as a responsible officer and citizen I should do my duty.

Yours obediently,

S. Subramanya.

Mukteswar.
1.5.27.

75-14

Ref. 95.25.21

Dear Sir

I am extremely sorry I did not see you before leaving Bangalore. As I ~~was~~ did not receive any of the Government orders from the Development Department. I did not know that I had to see you. I reached this place on 28.4.27 and had an interview with the Director on the 25th He asked me to go round acquaint myself with all the parts of the Institute and that he would talk to me later on. The second interview I had was yesterday as he was otherwise busy. The interview was a long one nearly an hour and a half. The Director asked what we were doing I told him that we have been going round the institute and seeing all branches, Collection of mosquito. When I asked him about the work he came here for, and the steps we have to make him, he started giving a long Sermon, dissuading me to take up the task of serum manufacture. "you can happy with the medical work for which you are trained and if I were you I will fight shy to take up this work" to use his own words.

He says if Mysore Government want to manufacture it is too premature; the first thing to do is to try and increase the demand in the State for some years - All this talk has been to create fear in me so that I may not take on myself the onerous duty as he calls it. Further he said he would communicate with the Government directly about the time and training one has to get. The period he wants to suggest is some years. From what I have observed there is no systematic training given here. One has to learn whatever comes in one's way. As a matter of fact what is learnt by the Veterinary Inspectors here is what is to be learnt by laboratory attendants. The present attitude of the Director may also be partially due to one of our men that have been here and whose name I do not want to mention. Because Mr. Edwards while talking to me yesterday told me that he enquired about me from one of the Inspectors whose name he mentioned and that he was told that I had some what of medical training. On the first interview day I told Mr Edwards all about me and that I worked under Dr. Cunningham of Lister Institute.

Yesterday evening, the Veterinary Inspector whom

name was mentioned by Mr. Edwards came to me having known that I had seen the Director and asked me what the latter told me. When I questioned him whether any body asked him about us. he replied that no one did and that he did not talk to any body about us.

The secret is that the Director does not want us to start the manufacturing of Serums. My stay in Muktesar for one week and going through every room where any work is done, makes me believe that is not much to learn. I have collected till now all the informations as in this the work is carried on. What I have yet to gather in this place is the standardisation of serums which they have not done since I arrived here. After observing this we have to Pasteurize for some time. This is the ___ substation of the Pasteur like where part of the work is done.

If I am permitted I have a say in the matter I suggest that no action be taken as soon as the Directors letter is received. While the correspondence

64

as soon as I shall gather all the facts and information. I shall leave the place when all the information are collected and when I feel confident that I can do the work in Bangalore. I am sure I will not take more than two months to gather all the information, as this place as the work done is very little. As soon as I return to Bangalore, experiments may be done to see which stone can be procured under the conditions of Bangalore.

I apologise for taking the liberty of writing this letter. I felt as a responsible officer I should do my duty.

Yours obediently,
L. Venkatramiah

APP. F. VI. Gl.]

SUBJECT.....

.....

.....

Section C-V.

File No. 9 52 25

Serial No 23

No. D 10720

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue 8.6.25

Signed by Tr N.R.

List of enclosures.....

Copied by.....

Examined by.....

To

Dr. P. Ramasarathy,

Dear Sir, With refce to your D.O. letters of 1/5/25 to the 1st & 3rd Members of Council regarding your training at Nuktesar, I ~~.....~~ desired to request you not to feel discouraged but to redouble your efforts to pick up as much knowledge as possible. Govt consider it a very important that you should be in a position if you ~~could~~ succeed to manufacture in the State over successful Serums

Yours Sincerely

WD 01265—GPB—31,000—24-12-25

D.O.5/

(6

Office of the Sanitary Commissioner
with the Government of Mysore,

Camp, Mysore, dated the 24th June 1927.

Dear Mr. Ranga Rao,

In continuation of my letter No. C. 40 of yesterdays date, I write to state that I received a telegram from Dr. Karve to-day intimating that Mr. P. Parthasarthi reported himself at the office on return from Muktesar and asking for instructions. In a letter addressed to me some time ago from Muktesar Mr. Parthasarthi had mentioned a Government Order requiring him to correspond with the Director of Agriculture while on deputation. As this order was not communicated to me I am not aware of the exact purport of it.

Now that Mr. Parthasarthi has reported himself to the Sanitary Commissioner instead of to the Director of Agriculture - as I believe he should have done had he abided by the Government Order he mentions, - I request instructions as to the further action I have to take in the matter.

Yours sincerely,

Millward

K.Ranga Rao, Esq., B.A.,B.L.,
Dy. Secretary to Govt.

In 10529

APP. F. VI. Gl.]

SUBJECT.....

.....

.....

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue 29/6/27

Signed by.....

List of enclosures.....

Copied by.....

Examined by.....

Section Secy

File No.

Serial No

D. O. No. C 95

delivered in person

29/6/27

To

Dear Sir

with reference to your D.O. letter No. 5 dated the 24th June 1927 about the [illegible] of Messrs. Parthasarathy Chetty from Imbala I am desired to request you to [illegible] Messrs Parthasarathy Chetty to report himself to the Director of [illegible]

over

take further
instructions from
him in the matter.
Yours Sincerely

RR
29/6.

To OB Overhaul with seven Escadrons

C.C.
29/6/15

App.F.VI-G1.] Two copies B650

SUBJECT .....

.....

.....

Diary No. of letter replied to .....

General and Revenue Secretariat

( )

, the 192

Date of issue .....

Signed by .....

List of enclosures .....

Copied by .....

Examined by .....

Section

File No.

Serial No. 96

No. D 86 & 97/27

To The Director
Govt. Textile Inst
Tumkur

Sir,

I am directed to enquire whether Mr. P. Parthasarathy underwent the full course and completed a section his training at the Institute

I have etc

for
2/7/27

over

App.F.VI G1.] B650

SUBJECT .....

.....

.....

Diary No. of letter replied to .....

General and Revenue Secretariat

( )

, the 192

Date of issue .....

Signed by .....

List of enclosures .....

Copied by .....

Examined by .....

Section

File No.

Serial No.

No. D

To The Director

Sir,

It has come to the notice of Govt that Dr P Parthasarathy who was deputed to Trichy, has returned to Bangalore, and I am directed to enquire whether he has undergone the full Course, & completed his training at the Rural Institute there

Thanking etc

for

2 7 27

over

7th July 1927.

D No. /51(4-27-1)

Dear Mr. Krumbiegel,

I understand that Dr. Parthasarathi has given you a report of the work done by him at Mukhtesar and also submitted a scheme of the work that might be taken up here in the immediate future. I am to request you to discuss them thoroughly with him and also prepare plans and estimates of the structures required. The Third Member of Council would like to go into the question in detail with you early next week, say Monday or Tuesday. He would be obliged if you could also arrange for the presence of Messrs. Parthasarathi and S.D. Achar and Major Simpson. I am to add that you might think out possible sites for the location of the serum factory and the lines on which an early commencement might be made.

Yours sincerely,

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

Telegraphic Address,
"AGRI., BANGALORE"
Code: 5th EDITION A. B. C.

OFFICE OF THE DIRECTOR,

D. O. No. Roc. 1576- of 25-26.

Bangalore, July 8, *1927*.

G. H. KRUMBIEGEL, ESQ., F.R.H.S.,
Offg. Director.

Dear Mr. Rama Rao,

Your D.O.No.D.190 of yesterday. I have already sent the report of Dr. Parthasarathi and this should have reached you ere now. The report requires some sifting and I shall arrange to come over on Monday (2 P.M. unless the Member fixes another hour) and we can discuss the matter. As you will see from my note forwarding Dr. Parthasarathi's report I consider it quite sufficient if we carry out the experimental serum production as originally arranged and develop the station subsequently.

Yours sincerely,

G. H. Krumbiegel

V. Rama Rao, Esq., B.A., B.L.,
Secretary to Government of Mysore,
Development Departments, Bangalore.

Telegraphic Address
"Agri., Bangalore"

DEPARTMENT OF AGRICULTURE
MYSORE STATE.

No. R.O.C 1576 3 25-26 E

Bangalore, 8th July 1927.

FROM

G. H. KRUMBIEGEL, ESQ., F.R.H.S.,
OFFG. DIRECTOR OF AGRICULTURE IN MYSORE,
BANGALORE.

To.

N. RAMA RAO. Esq., B.A. B.L.,

Secretary to the Government of Mysore,
Development Departments,
Bangalore.

SIR,

In reply to your letter No. 887 C.V. 95-25-27 dated 5th July 1927, I have the honour to state that both Dr. Parthasarathi and Mr. Achar have returned to Bangalore. I have called both to my office to inquire into the circumstances under which they returned at this early stage of the course. I find that both primarily returned from private reasons. Dr. Partha-sarathi being down with Hill Diorhoea, asked Mr. Edwards to allow him to return and to take Mr. Achar as he did not like to travel by himself. Mr. Edwards did at first not agree to allow Mr. Achar to leave, but the latter getting a telegram that his wife was ill he got Mr. Edward's permission to leave. They now however ignore these private reasons and contend that they acquired the 'knowledge of manufacturing serum' as directed in the Government Order and as the Government Order laid down no definite period, they hold that no authorisation for their return was necessary.

They thereby also ignore the fact that Mr. Edwards was asked to draw up a programme showing the nature of work and extent of their deputation.

I am not satisfied that they had enough time to -- actually work on the problems especially in blending and standardisation of serum.

Dr. Parthasarthi's report attached gives a good deal of theory on problems connected with inoculation, a good deal of observation has been done also but in essentials it is largely verbal information. I have however written to Mr. Edwards and his reply should give us some idea on this point though we must make the necessary allowance for his persistent attitude.

Regarding the organisation of the Serum Station, Dr. Parthasarthi's attitude is that the whole work must be under him in the Medical Department. This is impracticable as it is a purely Veterinary Institution and must essentially be developed by the Department for general research in other animal diseases such as Anthrax, Black Quarters, Sheep Pox etc., etc. This will require discussion but there can be no two opinions about it.

I would propose that we take up the work in our Virus Department on a scale as already sanctioned by Government and for which preparations are already made.

The present staff with Mr. Achar in charge will suffice and we can also recall the two Veterinary Inspectors now in training at Mukthesar. For the next 6 months work can be carried on without storing or cold storage provision since we shall be able to use all the serum manufactured immediately. The examinations for pyroplasmosis, etc., can be done either by Dr. Parthasarathi in the Vaccine Institute or as is now done in case of our virus by Dr. Dominick in the Health Institute. In fact the success of the virus production justifies the undertaking of the experimental serum production. The estimate attached to Dr. Parthasarathi's report will require modification and the question of whether it will be best to have the serum station at Bangalore or

Birur

also can be more fully considered in the light of experience gained during the experimental working.

I have the honour to be,

Sir,

Your most obedient servant,

Offg Director of Agriculture

To

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The Director of Agriculture
in Mysore, Bangalore.

Sir,

In accordance with Government Order No. dated Mr. Achar and I left Bangalore on the 18th April 1927 and arrived in Muktesar on the 24th of April 1927. The Director, Imperial Institute of Veterinary Research, Muktesar was interviewed by us on the 25th April. The following is the report of the work turned out:-

Went round every day Rinderpest side where the experimental Rinderpest animals were stalled. In those stalls animals are infected with Rinderpest virus so that that the height of disease virulent blood may be collected from them. From the day we arrived in Muktesar till nearly the end of my stay we invariably spent our early mornings in visiting these sheds and studying the several stages of the progress of the disease in these affected animals - often in company with Mr. De'Costa, the Deputy Superintendent, who was in charge of this section, who enlightened us on all matters connected with this line of work. As often as we could/were present during the operations of collection of virus, which were generally performed on Mondays and Wednesdays. Goats were also used with a view to find out the effects of the passage of Rinderpest virus through them and it has been found that goats develop Pneumonia as an invariable symptom of R.P. infection, whereas this is uncommon in cattle. When virus is collected and injected to other animals during serum simultaneous inoculation the latter may sometimes get piroplasmosis as a complication. This is due to the resuscitation of pyroplasma Bigeminum which had been latent and get revived in the course of reactions to the injections. One has also to be careful that the virus is not collected from an animal suffering from Piroplasmosis or the virus should be examined for pyro before being used. Bacterial contamination is another danger that is likely to occur and should be carefully guarded against. A sample of the virus despatched is always examined bacteriologically

bacteriologically and if it is found contaminated, information is sent by telegram prohibiting its use.

Post-Mortems:- Almost all the time we stayed at Muktesar, we attended the post-mortem room daily conducting or watching autopsies on animals that dies of rinderpest or other diseases from other experimental quarters. Here we studied post mortem changes in a number of rinderpest cases and the characteristic lessons occuring on lips, gums and tongue as well as in stomach, duodemum and coecum and other parts of the intestines in bulls and in the lungs of goats. Besides studying lessons of other diseases in bulls, goats and small animals. most animals were observed in harbour parasites such as oesophagostomes, Hemonchus contortus Hydatids &c., the first mentioned being most common among Hill Bulls. There were a number of cases of Hydatid infestations and in one case the cyst was found on one of the flaps of the auriculo-ventricular valves. The post mortem hall itself is well constructed and consists of 2 rooms. In one there is a microscope and other necessary articles for immediate examination of specimens. In the other there is a big table on wheels which moves on rails which leads to the incinerator at the other end. The tap of the table is covered with lead-sheets and carcasses are opened for examined on this. When the post-mortem examination is concluded the table is moved to the incinerator and the body is then thrown into it and burnt.

Renderpest Serum production:- This is done at Izatnagar. We went there on the 30th of May and received systematic training from the Officer in charge as per instructions of the Director. We studied the charts showing comparative effects of administration of virus and serum on the same day, with 24 hours intervals between the two and with 48 hours intervals. Sefum given 24 hours after virus gives the best results. We also studied the scale of potency of serum drawn on different days. That drawn on the 18th day showed the highest potency. We learnt the mode of preparation of "Rontine" "Hyperimmune" and "Topioca sera" All the 3 varieties of sera were also put to test at Muktesar on different sets of animals during the latter part of our stay there. We

We watched the test from the beginning to the end and this test as well as all their previous tests showed conclusively that the "Rontine" or "Immune" methods is the best that serum drawn after Hyperimmunisation is not only far more costly but gives rise to lysis of blood and black water bodies producing abscesses of pyaemia often in the serum producers themselves. The latter effects cause depreciation in the value of the producers and serum from such animals will not be sterile and may give rise to fatal pyaemia in the inoculated animals. The serum produced after the "Topicoa" method also did not prove any better than the "Rontine" serum. Hence in Muktesar the "Rontine" or "Immune" method of collecting serum is found in vogue. The method, briefly consists of injecting R.P. virus to an animal (Buffalo bull) on the 1st day follwed by an injection of anti R.P. serum the next day, in such a dose as is sufficient to permit a moderate rise of body temperature but preventing moush lesions, diarrhoea and other severe symptoms. The dose of serum administered usually 60 c.c. per 600 lbs. Body weight. 5 c.c. more of the rinderpest virus is given on the 6th day and the animals state of health is carefully watched. If the animal continues well and nothing untoward is observed either clinically or by blood examination the animal is on the 18th day, the quantity of blood to be drawn depending on the body weight of the animal. The bleeding is continued in 4 different series from the 18th to 64th day. The 4 series are respectively known as the L.M.N & O. series of bleedings. During the period of serum production the animals strength is kept up by sufficient and good food rich in proteins. The drawing of the blood and seperation of serum from it are both done in Izatnagar. The serum with the addition of a preservative is then stored in Izatnagar until sufficient quantity is accumulated for despatch to Muktesar, where it is tested for standardisation.

Standardisation:- The sera collected from the L.M.N & O. series of bleedings are tested on susceptible Hill bulls at Muktesar side by side with virus and tested for potency with proper controls. The potency of each kind of sera is computed

according to a scale of notations fixed by Mr. Edwards. According to the indications of this test the sera are divided into 3 groups :- Class 1. Class 2. and Class P. We have taken copies of these scales and have worked them there.

Class 1. Class 2 Consists of L. serum, which is usually the best, causing blocked out reactions even at 30 c.c. dose. This serum is usually issued for use in Imperial Dairy Farms &c.

Class 2. is of slightly less potency as compared with class 1 serum and is sent out for purposes of active Immunisation.

Class P. is a mixture of L.M.N & O. series is weaker serum the above two and is meant for prophylatic purposes only in serum alone inoculation or passive immunisation.

After classification they are accordingly stored and bottled corked and labelled in the serum room.

The serum stocking room cold room and bottling room are connected with one another.

The serum stocking room is furnished with 4 huge reservoirs makked L.M.N & O. for stocking the respective sera received from Izatnagar till the same is standarised.

The serum bottling room has 3 containers for holding class 1, 2 and P sera after standarisation and classification, prior to bottling them.

The cold chamber consists of a dug out wherein are stored the bottles which are filled with serum and corked with crown corks and duly labelled.

Black Quarter Aggressin:- The preparation consists of extracts of muscler of buffaloes which had been infected with black quarter Polyvalent and B. Chauvei virulent cultures. The extracts are then mixed, filtered, so as to be germ-free and formalised. Ether and Ortherol are added to them and they are bottled and stored ready for issue. The animals used for this purpose are some of those which had already served as serum

makers.

Black Quarters Filtrate which is prepared in America is believed equally efficious as aggressin and less costly than it for preparation. This, however, is not yet adopted in Muktesar. Experiments were conducted to confirm the roxicity of unfiltered aggressin and the safety of filtered aggressin.

Anti-aggressin serum:- is produced as anti toxic serum by giving increasing quantities of aggressin and after 100 c.c. are given bleeding is started after 9 days and repeated every 9th day giving on the evening of bleeding day a further injection of 100 c.c. of aggressin.

H. S. Vaccine:- This is prepared from a-virulent cultures of H.S. bacilli in digested meat broth and sterilised for an hour-and a half at 70° c. .5% Phenol is added as a preservative. The organism is rendered avirluent by culturing 120 times on Agar Agar.

H.S.Serum:- This is prepared in Izatnagar. To prepare it buffalo bulls are given 200 c.c. of live avirluent culture and bleeding the animal on the 9th day at the rate of 6 c.c. per lb. of body weight. The serum is collected as usual from the blood and preservatives are added.

Mallein: This prepared by making cultures of glanders bacillus in gylcerine. The culture is filtered and sterilised. This is then reduced to 1/10 of its volume by heat and is known as"concentrated mallein". For I.P.P. the quantity is raised again to 1/4 and for "ordinary" mallein it is brought back to the original quantity comparartive tests were conducted with the mallein from the Pasteur Institute and the mallein manufactured locally at Muktesar, with the result that the former seemed more effective:-

Strangles Vaccine:- This is a mixed vaccine consisting of streptococcus (Strangles) Staphylococcus Aureus, Albus and Diphtheroides. Streptococcus culture is made in serum Glucose Broth for 48 hours, and cultures of the other organisms are made

on Agar, mixed up and sterilised at 65° C. for 3 hours. Phenolised and counted.

Pathology Section:- Cut some sections of tuberculer glands - recognised some sections of cancer in horse; pneumonia in sheep and goats especially those that died of renderpest. Cut sections of rinderpest ulcers for microspopic examination as there is no written pathological discription of the R.P. ulcers as told by Dr. Edwards.

In addition as there is a splindid Library with a large number of journals opportunity was taken to study the preparation of calf lymph vaccine potent and bacteria-free as obtained by Dr. Noguchi of Rockfeller Foundation. Experiments done by Prof: Ledingham to get a potent virus from small-pox cases and his method of obtaining bacteria-free virus from ordinary vaccine were also studied. The Italian method of preparation of Rabies Vaccine was also studied and notes taken. Methods of recognising Negri bodies for rapid diagnosis was also studied. Notes on other pathological techniques were taken down.

Our period of stay in Muktesar dated from 24th April to June 15th. On 28th May we left Muktesar to go to Izatnagar and returned to Muktesar on June 5th as arranged by Dr. Edwards. After returning I remained in Muktesar until I left the place as a result of my illness. During this period of my stay in Muktesar I was confined to bed twice once before going to Izatnagar and the second time after my return. As I was bad with diarrhoea and palpatation I left Muktesar after taking permission from the Director and with the advice of the Medical Officer there. In addition I got a summon on the 10th Instant from the Sessions Court, Bangalore City to give evidence in a murder case which I attended on the 27th and 28th. I left Muktesar on the 15th Instant and arrived in Bangalore on the 23rd Instant. Finally I beg to state as per Government Order I have learnt all that there was to learn at Muktesar regarding the manufacture of anti-rinderpest serum, other sera vaccines &c. I feel confident that I can prepare all the above if required to do so. I beg to

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submit that the above report is a consise extract of the study and information collected as regards methods of preparation of anti-rinderpest serum and other sera vaccines &c. at Muktesar.

I beg to submit a scheme for the production of anti-rinderpest serum and other materials.

Location of the Institute. The place must have conveniences as water, gass and electricity and must have a favourable temperature anywhere between 60 and 90 degrees F. during most part of the year so that unnecessarily large quantities of serum need not be stocked as the material may lose in potency by keeping for a long time. From all considerations, Bangalore seems to be an ideal place as it has all the facilities and favourable temperature conditions except perhaps during one month when the temperature may go beyond 90° F. when the serum production may have to be suspended. Bangalore has also water gas and electricity conveniences and the centrly situated for transmission of material from the Institute out by rail &c.

Site:- has to be selected to suit the purpose.

Cost of production:- the following has been worked out for the quantity of serum that was obtained from Muktesar in 1925-26 when nearly 40,000 animals were protected by serum simultaneous methods and about 66,000 animals were protected by the serum alone method. For the 40,000 animals 4,00,000 doses were obtained. Serum was also obtained for the S.A. method it costed the Government about 200,000/- rupees.

Taking the average weight of Mysore Buffolo to be 400 lbs. as compared to 600 lbs. of North-Indian Buffolo to produce the same amount of Class 1 serum for the serum simultaneous method using the same dose as was used in 1925-26 - 350 animals are required. The other sera collected from M.N & O. bleedings from these animals which is double in quantity of the Class 1 serum with the serum of 150 more animals prophylactic serum with efficient potency can be obtained with which more than 66,000 animals can be protected by the serum alone method. Working on this basis, the cost of

purchase, feed &c. is as follows:-

Cost of 500 animals. (This is the difference in cost between the purchase price and sale price of the animals.)	Rs. 10,000	0 0
Feeding charges. ...	15,000	0 0
Coolies 16 (8 for each shift) ... @ 13/- per coole.	2,500	0 0
3 Salastries ...	1,000	0 0
Total	28500	

Staff:-

Bacteriological Section. -

Chief Bacteriologist.	Rs. 4,800	0 0
Asst: Bacteriologist.	" 2,400	0 0
Attendant 1	360	0 0
Pathological Section. (to be under the control of Chief Bacteriologist)	"	
Veterniary Inspector 1	" 1,200	0 0
Attendant 1	" 360	0 0
Sweepers 2	" 480	0 0

Media Room:-

Media man ...	" 480	0 0
Assistant 1 --.	" 180	0 0

Sterilising Room:-

Machenic ...	" 480	0 0

Cleaning Room:-

3 Attendants at 15/- each ..	" 540	0 0

Serum Room:-

One Veterinary Officer ...	" 1,800	0 0
One " Inspector ...	" 1000	0 0
Attendants 2 ...	360	0 0

Packing Section.-

One Carpenter ...	360	0 0
Coolies 2 ...	480	0 0

Office:-

Manager ...	1,000	0 0
Accountant ...	720	0 0

Serum Clerk	....	Rs.	480	0 0
General Clerk	...	"	480	0 0
Typist	...	"	600	0 0
Peons 10	...	"	1,560	0 0
Stores:-				
Store Keeper	...		600	0 0
Peon	...		160	0 0
Library :-				
Librarian	...		600	0 0
Miscessilian Section:-				
Current Gass and water			1,500	0 0
Stationery	...		2,000	0 0
Contingencies	...		4,000	0 0
Refrigerator	...		2,500	0 0
Journals.	...		1,000	0 0
Yearly purchase of Chemical &c.			3,000	0 0
	Total		63980 - 0	

Thus stated in round figure for the sum of Rs.64,000/- serum can be prepared to the same extent as was bought in 1925-26. In addition H.S. Vaccine serum; black quarter aggressin and serum for filterate and other vaccines that are necessary may be produced at very little additional cost.

As facilities will be available in the Institute vaccines as Plague, Typhoid, Cholera and anti-rabic and serum as anti-streptococcal may be easily prepared with some extra cost provided for personal in the shape of assistants that may be necessary.

Yours obediently.

Bangalore,

Dated July 1927.

P. S. Varthamoorthy

Superintendent, Vaccine Institute under training. on deputation.

Preperation of Vaccines etc,

Material used during 26-27.

Plague vaccine	20685 bulbs	Rs 15514
Cholera Vaccine	1280 "	Rs 3840
Typhoid "	9 "	Rs 54

Sera :

Antidiphtheritic serum.	137 bulbs	Rs 462
Antistreptococcal		Rs 1120
Anti tetanic	522 "	Rs 1762
Total		Rs 22,752

Rs 20,000 have been spent for the purchase of plague and cholera vaccine alone during the year. If a senior assisstant at Rs 200 permensem , @ junior assisstant @ Rs 100 ,and three attendants be provided the vaccines may be prepared in the institute with an additional expenditure of Rs4000@ provided for materials as glass bulbs and other laboratory requirements. Thus it will cost in all about 8200 to produce these two vaccines as compared to Rs 20,000 that was spent last year.

Inx addition typhoid vaccine is largely used by Cantonement municipality and there is every likelihood of Bangalore using a large quantity of this as cases of Typhoid are not rare in the state.

Sera: Quantity of serum required to treat cases wx of Diphtheria and Tetanus is large each dose requiring about 16,000 to 20,000 units it is very costly at present to make use of the sera as the cost of each bulb of 2000 units costs about Rs 3/8 and as such each requires an expenditure of Rs 75 before a cure can safely be predicted. If these are available cheap many lives may be saved. The use of anti-

The use of Anti- streptococcal serum is increasing in cases of Puerperal fevers and other septecaemic conditions.

It will be possible to prepare the sera with th same staff as above and a further provission fob the maintonance of six horses and stable boys which in all come to ₹ 9000.

Initial expenditure for the preperation of Anti Rinderpest

Serum

Reservoires big 4	Rs 800
Mixing tank 1	Rs 150
Alluminium vessels	Rs 500
Enamoll buckets 2 dozs	Rs 200
xxxxxxx	
~~xxxxxx

Telegraphic Address
"Agri., Bangalore."

DEPARTMENT OF AGRICULTURE, MYSORE STATE.

No. R.O.C. 1571 E1
25-26

Bangalore, July 1927

GEN. & REV. SECRETARIAT
16 JUL 1927
DEVELOPMENT BRANCH.

FROM

G. H. KRUMBIEGEL, ESQ., F.R.H.S.,
OFFG. DIRECTOR OF AGRICULTURE IN MYSORE,
BANGALORE.

To

The Secretary to the Government of
His Highness the Maharja of Mysore,
Development Departments,
B a n g a l o r e .

SIR,

In continuation of the verbal discussion with the Third Member regarding the Serum production experiment, I have the honour to forward herewith a more detailed estimate of the cost.

As arranged the production of Serum will be taken up in the Virus Depot and will go hand in hand with virus production so as to -- avoid the duplication of staff and equipment.

The total estimate comes to Rs. 31,853/- and of this items Nos. 1 and 4 are or Rs. 13,100 are non-recurring except chemicals and contingencies (Rs. 1,500/-) so that approximately Rs. 12,000/- may be taken as non-recurring and Rs. 20,000 as recurring.

This amount of Rs. 20,000/- then represents the estimated cost of the actual production of serum and virus for three months and should -- give us a quantity of serum equivalent to that which would cost -- Rs. 60,000/- if obtained at Muktesar.

Thus 3 represents the less on 150 cattle when resold after using them for production -- as also cost of their feeding, and item 5 represents the cost of the cattle used for virus production.

These charges I hope will be considerably reduced once a proper working of the station is organised, the reduction being effected (a) by getting adequate grazing grounds to save purchase of hay and

P.T.O.

and green fodder and (b) by our being able to get a better type of animals which will still fetch a good price on resale so that the difference between price at purchase and at resale will be lessened.

The amount sanctioned by Government for the serum experiment comes to Rs. 20,000/- and the sums sanctioned for virus productions comes to about Rs. 10,000/- which is also the budget provision, though this has been omitted by the Comptroller.

These sanctions, therefore, practically cover the estimate of amount of the present estimate, being only short by Rs. 1,853/- so that sanction really only for this sum is required together with making necessary provisions for funds.

I shall esteem it a great favour if this is done early as a certain amount of preliminary work has to be done ere we can start the actual production and I am anxious that during the three months a fairly large amount of serum and virus should be manufactured.

I have the honour to be,

Sir,

Your most obedient servant,

Offg. Director of Agriculture.

VR.

Telegraphic address:-
"Sera" Ritani.

No. 1511

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IMPERIAL INSTITUTE OF VETERINARY RESEARCH, MUKTESAR.

From

J. T. Edwards Esquire, D.Sc.(Lond.), M.R.C.V.S.,
Director,
Imperial Institute of Veterinary Research.

95-25-32

CEN. & REV. SECRETARIAT
To 1117

The Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Departments,
General and Revenue Secretariat,
Bangalore.

Dated P.O.Ritani, the [illegible] July 1927.

Subject: Education; Special training of Dr. P. Parthasarathy and Mr. S. D. Achar, Veterinary Inspector, in the methods of preparation of anti-rinderpest serum.

Sir,

I have the honour to acknowledge the receipt of your letter No. D-86/C.V.95-25-26 dated the 5th instant, marked "Immediate", requesting for information as to whether Dr. P. Parthasarathy underwent the contemplated full course of training at this Institute.

2. Arrangements had been made for a course of training for Messrs. Parthasarathy and Achar at this Institute extending over 6 months, as requested in letter No. 13971/28/2 dated 26th February last from the Superintendent, Mysore Civil Veterinary Department to me. This period of study may be regarded as the minimum length of time required by a man possessing first-class basic attainments to study the rudiments of the practice of anti-rinderpest serum manufacture. In my letter to you, No.114 dated 9th April last, it was stated that a course of training would be laid down for the men specially to meet their require-ments, having regard to the standard of knowledge to which they had already attained, on their arrival: it was further contem-plated in this letter that their stay here might profitably be of longer duration, to witness our procedures during the period of most active manufacture, in the approaching cold weather. A

copy

copy of the programme embodying the main principles of the system of instruction is attached.

3. Both gentlemen arrived here on 24th April 1927 and departed on 15th June 1927. The circumstances of their departure are stated in the attached copies of communications which they passed to me before they left. Dr. Parthasarathy left urgently on the plea of a grave internal malady, from which he suffered locally at Muktesar, and Mr. Achar simultaneously received intimation of a distressing domestic calamity which impelled his immediate departure. Their actual course of training here thus extended over 1 month and 22 days, and so neither gentlemen completed his course of training and I can offer no guarantee that they have attained proficiency in the art of rinderpest serum making.

4. A full report on the training they had actually undergone (drafted by my colleague Mr. S. K. Sen, Secretary of the Instruction Classes) is submitted for your information, together with copies of the remarks upon their progress prepared at my request by Major R. F. Stirling, Pathologist, and Mr. J. R. Maddow, 3rd Veterinary Research Officer. In compliance with the original programme they came especially under the notice of Major Stirling, who had particular instructions to execute the practical studies laid down for the earlier part of the 6 months course; his remarks may therefore be accepted as authoritative. I devoted a great deal of my own time to special demonstrations for these two visitors. The material for practical demonstration in our sheds at Muktesar was unique, and I endeavoured to explain to them during their stay all I could concerning the multifarious exigencies of the proper manufacture of serum. I found both gentlemen very attentive and enthusiastic. Free access was given to them to all sides of the work, both at Muktesar and Izatnagar, which they visited for a week, and where the large-scale crude manufacture is carried out. As they had not, however, completed more than a small portion of the systematic training, to be imparted in the daily lectures prepared for them, they cannot have

gained

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gained a rational knowledge of the processes, and, as I have said before, I cannot guarantee for them any proficiency in the art of manufacture of rinderpest serum: I was unable by their early departure to complete the necessary tuition and to put them through the necessary practical tests, that would have enabled me to gauge their attainments.

5. I am pleased to say that Messrs. K. Ranganath Rao and P. N. Nair, who were deputed by your Government here for a 3 years course of taining on 3rd January 1925, are undergoing their studies very satisfactorily. The impression both my colleagues and I have formed of their progress has been such as to indicate for them considerable promise.

6. I have also received a D.O. letter (No.25/c dated 27th June) from the Offg. Director, Department of Agriculture, Mysore State (copy attached). The information given in this letter was already prepared to submit as a reply to his letter, but as it is now given to you herewith I shall be glad if you will communicate it to him. In his D.O. letter, Mr. Krumbiegel states that he does not anticipate any difficulty in the actual manufacture of the serum in Mysore. I have already expressed my views upon this subject at some length in my letter No. 3047/IX-0-11 dated 10th December last to the Agricultural Adviser to the Government of India, copy of which was sent to the Offg. Director of Agriculture in Mysore under cover of my office endorsement No. 3048 of the same date: this communication will, I presume, be readily accessible to you. In that letter, I recorded my opinion, for what my experience is worth, that the process of anti-rinderpest serum manufacture is a "source of never-ending anxiety" . I have passed Mr. Krumbiegel's letter to my colleague Major Stirling, who has recently come to act as Pathologist to this Institute and who has had immediate contact with the various technical systems, for an expression of, what may be very probably, a less biassed opinion on this subject. I enclose a copy of his remarks, and commend them as the appreciation of an exceptionally shrewd technical observer.

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6. In conclusion, I wish to assure you that the resources of this Institute will be utilised to the fullest degree to meet with the desires of your Government in devising means for the successful combat of rinderpest.

I have the honour to be,

Sir,

Your most obedient servant,

Director,

Imperial Institute of Veterinary Research.

R.
15/7.

Encls:- As indicated in text.— 11.

Instruction. 1927.

Imperial Institute of Veterinary Research, Mukteswar,
P.O.Ritani, District Naini Tal, U.P.

The system of instruction to be imparted during the current year will be very a simple one, and will be designed to give the maximum amount of information to visiting officers and every facility to become acquainted with our technical process, while at the same time relieving responsible officers almost entirely of the burden of routine teaching . Likewise, the system is designed to improve the knowledge of the existing technical members of the staff :-

A. Daily (excepting Saturdays and Sundays).

4.0 - 5.30 p.m. - Meeting in Class Room.

(i). At this meeting, lectures will be given by the Director personally, and such higher members of the staff as will be designated by him to lecture on special subjects from time time. These lectures must not exceed one-half hour in duration, and may be given at any time, with n the 1½ hour allotted for the meeting.

(ii). Demonstrations, of any specimens of interest ϕ or the records of current research work, that appear worthy of communication. To occupy not more than half-an-hour.

(iii). Discussions on current technical literature. All men of categories (iv) (a) and (b), as specified below, are expected to have read the current literature in the Library, and will be called upon in turn to address the Meeting, for a period not exceeding 10 minutes in the case of each man, on some subject which he has read and considers worthy of communication to the Meeting. These short addresses will be followed by discussions which will be

conducted by duly elected President.

(iv).Persons to attend this Meeting shall be :-

(a) All visiting officers - of whatever rank.

(b) All veterinary inspectors on duty at Muktesar, unless their work demands them elsewhere unavoidably at the time.

(c) All Class I and Class II officers of the Laboratory, but their attendance shall be optional except when their names are set down for particular lectures or demonstrations.

B. Practical Work.

Visiting Officers shall be made acquainted with the following branches of work :-

(a) Post-mortem room. At least one month in actual work during a six month's stay.

(b) Pathological laboratory. One month.

(c) Bacteriological laboratory (Mr. Mobbs).

(d) Izatnagar process. Two visits; each of about 7 days' duration, in the case of 6 months visitors, at the beginning and end of their stay.

(e).Serum Room and Serum Testing processes. To be attached to Officer in charge Serum Room and Veterinary Deputy Superintendent for at least 14 days each.

(f) Vaccine preparation etc. (Mallein, Tuberculin blackquarter aggressin, haemorrhagic septicae--mia vaccine) - 14 days at least.

(g) Routine blood smear examination. This work to be strongly organised again, and each visitor to be attached for work at least a month.

C. Control of Instruction.

(a). President - Director.

Vice President - Mr. Haddow.

Secretary - Mr. Sen, assisted by senior visiting officer.

A Committee of three members to be elected by those eligible to attend the Daily Meetings; these three members may be nominated by them afresh as often as they desire.

(b). The officers and committee shall meet once weekly in the Director's office at 2-30 p.m. every Monday, for the following purposes :-

(i). To receive Secretary's report upon the progress made during the ~~xxxxxxxx~~ preceding week.

(ii). To lay down details of instruction for the current week.

(iii). To scrutinise the notes taken by the categories of men under A (iv)(a) and (b) of of the instruction given.

(c). If the President is not available, the Vice--President will take his place; if the latter is not available, the senior Committee member will take his place.

(d). This scheme shall proceed indefinitely, until contrary orders are given; the greatest regard shall be paid to punctuality at the Meetings.

Sd/- J.T.Edwards,

Director,

Imperial Institute of Veterinary Research.

------ R. 16/7.

Report upon the Instruction given to Dr.P.Parthasarathy and Mr. S. D. Achar, Officers from Mysore..

(The two officers arrived at Muktesar on the 24th April 1927 and left Muktesar on the 15th June 1927.),

A. Daily Meetings.

1. Director.

(a) Opened the Instruction Classes and delivered a short inaugural address.

(b) A long discourse on the study of Veterinary literature and the preparation of scientific papers for publication, the various points in the discourse being illustrated by reference to some of the representative periodicals.

(c) The method of carrying out post-mortem examination of animals. The operation was performed by the Director upon a goat that had died of experimental rinderpest. The various organs were serially dissected out and laid open, and discourses were given on their structure and inter-relationship and the post-mortem indications that were to be looked for for diagnostic purposes. The demonstration lasted for about 2 hours.

(d) The microscope. A preliminary lecture on the mechanism and working of the microscope.

(e) The principles of Romanowsky staining. A brief history was given of the circumstances antecedent to the discovery of what is collectively known as "Romanowsky staining". The basic chemical principles underlying the phenomenon of staining were briefly explained and emphasis was laid on the necessity of a correct appreciation of these principles for acquiring proficiency in the "art" of staining. An account was given of the various modifications of Romanowsky staining and the connotations of such terms, as "basophile","acidophile", "~~neu~~ "neutrophile", were explained at length. The lecture was illustrated by the exhibition of some of the more important stains.

(f) The correct significance in science of the terms "health" and "disease" was explained and a rigorous analysis was made of

the causes which induce what is called "disease". Reference was made to the various factors of importance in the hygenic maintenance of animals, these factors comprising air, water, food, accommodation, temperature and freedom from injury. The more important forms of injury were also enumerated and explained.

(g) Infection. It was explained how the phenomenon of infection could be viewed as an injury inflicted by living bodies and the main forms in which the phenomenon manifests itself were explained by reference to what is observable in the case of certain well-known diseases as they affect the various species of domesticated animals. A brief survey was made of the two broad categories of mirco-organisms, namely, "harmful" and "beneficial", and reference was made to the complex character of the phenomenon of infection, brought about by what may be designated as "species susceptibility", "age susceptibility" and "tissue susceptibility". The subjects of symbiosis and attenuation and the conception involved in the term ---- "pathogenicity" were incidentally touched upon with a view to presenting the whole subject of infection in its true perspective.

(h) Special discourse to the two Mysore officers on the standar--disation of anti-rinderpest serum. Reference was made to the suitability of hill bulls for standardisation tests on account of their great susceptibility to rinderpest. The question of age susceptibility was dwelt upon and mention was made of the complications arising in the course of the experiments by the intervention of piroplasmosis (mostly) and coccidiosis (sometimes). Mention was made of the size of the doses of the various brews employed for test purposes and the method was described whereby a serum with a guaranteed potency of 50 per cent. was obtained. A reference was made to the misleading procedure adopted by Veterinary Inspectors in the past in selecting older and less susceptible animals for

testing smaller doses in order that the serum might show good results. Stress was laid on the desirability of selecting animals without bias. What, in fact, was needed was that the serum should be definitely reliable and highly potent and not necessarily "brilliant".

(i) Rinderpest serum tests. (The discourse was given in the Rinderpest sheds.) The question of the two factors of "safety" and "potency" was dwelt upon at length in their bearing upon the procedure to ~~the~~ be adopted in testing anti-rinderpest serum. An analysis was made of the conceptions involved in the expressions "susceptibility" and "immunity" and it was explained how the biological law of natural selection and topographical conditions operated to render the plains cattle much less susceptible than the hill cattle to rinderpest. The principles to be kept in view in selecting controls were dwelt upon and stress was laid upon the importance of careful observation and a retentive memory in order that the experience recorded might be trustworthy.

(j) Rinderpest serum tests (continued). (Of the two Mysore officers, only Mr. Achar was present. Dr. Parthsarathy could not attend owing to indisposition.) The class was held in one of the rinderpest sheds and the lecture was illustrated by actual reference to the large number of animals under observation in that shed. The lecture opened with a brief reference to the concept involved in the term "research", as distinguished from mere "search". Stress was laid upon the rigour and refinement of the methods essential for truly intensive research and the necessity of reducing the main problem to the simplest terms, unencumbered, as far as possible, by questions which are only subsidiary to the main issue. In planning experiments it was essential (a) to pay attention to the results recorded by previous workers; (b) to proceed unbiassed; (c) not to complicate the main problems with secondary issues; (d) to ensure uniformity and

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adequacy of material; (e) to arrange for a sufficient number of controls; and (f) not to view separately an isolated part of the experiment, but to regard all such parts in their relation--ship to the main problem. The Director then went over all the numerous charts, one by one, explained the various entries at length, interpreted them and explained their significance in their bearing upon the question whether what was known as the method of "hyper-immunisation" was superior to the "immunisation" or "tapioca" method recently evolved by the Institute. The Director explained why from a study of the charts the conclusion was warranted that the serum obtained by the "hyper-immunisation" method was not better than that obtained by the "immunisation" or "tapioca" method.

2. Major Stirling.

Sterilisation. (Dr. Parthasarathy could not attend this lecture owing to indisposition.) The various methods of sterilisation were systematically surveyed, commencing with the two fundamental categories - "Heating" or "destruction" and "Filtration" (or "removal") into which the process of sterilisation resolved itself. The process of "heating" itself was classified into "dry", "sterilisation at low temperature", and "moist". Reference was made, again, to the three well-defined forms of "dry" heating, namely, drying by means of (i) hot air, (2) red heat and (3) flaming. The various forms of "moist" heating were similarly described, and a sketch was given of an apparatus used for drying by means of hot air.

3. Mr. Haddow.

Mallein testing (two lectures). A brief description was given of glanders as it affects mules, asses and horses and also camels, dogs and cats. The morphological and cultural characters of the glanders bacillus were briefly described. Reference was made to the testing of mallein by means of chemical and biological methods and the modus operandi of

its application for the diagnosis of glanders was discussed at length. Incidentally, the relative merits of agglutination, precipitation and complement fixation were touched upon in their bearing upon the diagnosis of glanders.

4. Mr. Goffi.

(a) Dietetics. The discourse extended up to the "proximate principles".

(b) Dietetics (continued). The lecturer referred to the main constituents of food material, such as water, mineral salts, nitrogenous and non-nitrogenous substances and enumerated the elements which occur in the animal body.

5. Mr. D'Costa.

(a) Clinical demonstration of rinderpest. The demonstration was given in one of the rinderpest sheds and the various points of diagnostic importance were explained by actual reference to the experimental animals maintained in the sheds in different stages of the disease.

(b) An informal special discourse to the two Mysore officers upon the principles of rinderpest serum manufacture. In the course of the discourse, the lecturer explained the methods employed for adjudging the potency of the various brews and standardizing serum with a guaranteed potency of 50 per cent. The relative merits of the sera obtained by the so-called "hyper-immunisation" and "immunisation" methods were discussed and the reasons were explained why t the "hyper-immunisation" method was not regarded superior to the "immunisation" method. The lecturer also discussed the relationship between the quality of the serum on the one hand and the conditions of the animals employed for serum production and climatic influences on the other.

6. Mr. Hobbs.

Preparation of culture media. The lecturer explained the basic principle underlying the preparation of culture media, this principle concerning itself with

the approximation of the media to the natural conditions requisite for the growth of the organisms. Various formulae were given and several types of media were demonstrated.

7. Mr. Sen.

Fowl Spirochaetosis. A brief reference was made to the observations recorded by early French workers and some of the recent workers in regard to the manner in which the disease was transmitted through the agency of ticks (Argas persicus). The records of recent research work carried out in this connection in the laboratory were shown and explained to the Meeting and a demonstration was given of the appliances used for transmission experiments. Later, specimens of living spirochaetes responsible for the disease were demonstrated under dark-ground illumination.

8. Mr. Amarnath.

Laboratory diagnosis of helminth infections. A description was given of the direct and indirect methods of diagnosis. The first was concerned with the actual finding of the worms with the aid of the naked eye or the microscope and the second with the detection of antibodies and anaphylactic symptoms. A brief account was given of the method employed at the Muktesar laboratory of classifying the more common helminth eggs from their morphological characters.

Visiting officers and Veterinary Inspectors were subjected to a written examination on the 13th June 1927. There were three questions and these were set by the Director. Of the two Mysore Officers, Mr. Achar only sat for the examination: Dr. Parthsarathy could not attend on account of indisposition.

B. Practical Work.

During the period of their stay at Muktesar, Dr. Parthasarathy and Mr. Achar worked in the

(a) Pathological Section where their duties comprised

(i) examination of slides of morbid material;

(2) performance of post-mortem operations, particularly on bulls and goats;

(3) examination of internal organs for parasitic worms; and

(4) writing of post-mortem reports.

(b) Rinderpest sheds where their duties were mainly as follows :-

(1) Injection of virulent blood into hill bulls;

(2) clinical observations (including noting of temperatures) on animals experimentally infected with rinderpest; and

(3) preparation of charts of experimental animals.

On the 28th May 1927, the two officers left Muktesar for the Branch Laboratory at Izatnagar where they arrived at 7 p.m. on the 29th May. Here the two officers underwent a systematic course of instruction and demonstration in connection with the manufacture of anti-rinderpest and haemorrhagic septicaemia serum and other technical work carried on in that laboratory. The following notes have been compiled from the diary of one of the two officers (Mr. Achar) :-

29-V-27. Arrived Bareilly at 7 p.m.

30-V-27. Shown round the laboratory at Izatnagar.

31-V-27. Studied a number of temperature charts.

1-VI-27. Witnessed the method of blooding buffaloes and collecting serum. Later, bled one buffalo himself.

2-VI-27. Worked in the laboratory.

3-VI-27. Bled two buffaloes for H.S. serum and saw two more bled for the same purpose. Watched the process of extracting serum and the method of injecting H.S. avirulent broth culture.

4-VI-27. Left Izatnagar.

5-VI-27, 6.p.m. Arrived at Muktesar.

C. Short addresses.

During the period of stay of the two Mysore officers at Muktesar, the following short addresses on current Veterinary literature were given by Visiting Officers and Veterinary Inspectors :-

(1). Nasal Granuloma. (Abstract of a paper in Indian Veterinary Journal.)

(2). Vaccination against Foot and Mouth Disease by means of Formalinised virus. (Abstract of a paper in Journal of Comparative Pathology and Therapeutics.)

(3). The preparation of Virulent Cultures of B.diphtheria into Virulent and Avirulent Types. (Abstract of a paper in British Journal of Experimental Pathology.) This address was given by Dr. Parthasarathy.

(4). Efficacy of Kamala and Tetrachlorethylene as Anthelmintics in Chickens. (Abstract of a paper in Journal of American Veterinary Medical Association.)

(5). Oxygeno-therapy. (Abstract of a paper in North American Veterinarian.) Read by Mr. Achar.

(6) Bilharziasis in Darjeeling. (Personal experience.)

(7). Protective Vaccines against Mare Abortion. (Abstract of a paper in Jl. Amer. Vet. Med. Assoc.)

(8). Sero-therapy of Tetanus. (Abstract of a paper in Jl. Comp. Path. & Therap.)

(9). Bursati. (Abstract of a paper in Jl.Amer.Vet. Med. Assoc)

(10). Haemorrhagic Septicaemia Aggressin. (Results of experimental observations at Muktesar.)

(11). Diet and Disease. (Abstract of a paper in American Journal of Tropical Medicine.)

(12). Foot and Mouth Disease. (Abstract of a paper in Jl. Comp. Path. & Therap.)

R. 16/2.

(13) Effect of Type I Pneumococcal Culture Broth on the Protective Action of Type I Antiserum. (Abstract of a paper in Journal of Infectious Diseases.) Read by Dr. Parthasarathy.

(14). Discussion of some Recent Methods for the Conversion of Avirulent Clostridium chauvoei into Virulent form by use of Ferric Salts.

(15). Comparative Efficiency of Blackquarter Aggressin and Blackquarter Filtrate. (A discussion) By Mr. Achar.

(16) Methods of Anthrax Immunisation. (Abstract of a paper in Jl. Amer. Vet. Med. Assoc.)

(17) A resumé of literature on Theileriasis with special reference to T.ovis Infection. (An account of the work recently carried out at Muktesar in this connection was also presented.)

(18) Pathogenesis of Milk Fever. (Abstract of a paper in Cornell Veterinarian.)

(19) Ultra-violet Radiation. (Abstract of a paper in Veterinary Record.)

(20) Piroplasma gibsoni. (Abstract of a paper in Indian Journal of Medical Research.)

(21) Bacillus abortus Bang. (Abstract of a paper in Jl. Infec. Dis.) Read by Mr. Achar.

(22) Prophylactic Immunisation of Dogs against Rabies by a Single Injection of a Dead Virus Vaccine.

(23) The Significance of B. bronchisepticus in cases of Canine Distemper. (Abstract of a paper in Jl. Amer. Vet. Med. Assoc.)

(24) Tuberculin Testing (Abstract of a paper in Vet.Record.)

(25) Protective Inoculation with B C G against Tuberculosis Infection in Man and Animals. (Abstract of a paper in Vet. Record.)

(26) Anthrax Outbreak in a Zoological Garden. (Abstract of a paper in Jl. Comp. Path. & Therap.)

(3) Muktesar 107

14. 6. 27.

Dear Dr. Edwards,

Since I arrived in Muktesar I have not been keeping well as I told you a few days ago. Prior to going to Bareilly I had a severe attack of diarrhoea which I got over in Bareilly. Since my return here I have gone bad again and am confined to bed for the last four days. As I do not find any material improvement in my health and as I am getting weaken and weaken every day I have decided to go back to Bangalore to-morrow. I regret my inability to see you in person and talk to you about my decision. I, therefore, write this letter, which I trust you will kindly excuse.

As I have to do a long journey I am taking Mr. Achar also with me.

I should be guilty of ingratitude if I did not thankfully acknowledge all the kindnesses and courtesies that you have been good enough to show me. It is with pleasure that I feel extreme-ly thankful to you for you kind intervention in the Bungalow affair which has saved me much unnecessary expense. I shall always remember with gratitude the facilities kindly provided to us by you for learning the work we were deputed for i.e. serum production, testing etc.

I am sorry I am prevented by my ill health to stay longer to do the research work on the Histopathology of Rinderpest as desired by you.

Thanking you again for all the kindness and help given to us by you and your staff.

I remain

Yours very sincerely,

Sd. P.Parthasarathy.

R. 16/7.

(4) 10

Please return this note with your reply.

Medical Officer,

Muktesar.

I have just received a letter from Dr.Parthasarathy stating that his health has suffered to such a degree recently that he is unable to continue residence longer at Muktesar and is obliged to leave to-morrow accompanied by Mr.Achar for Bangalore.

Will you kindly examine his condition for me, as I will have to intimate this matter to the Government of India, stating whether it is your opinion that he should leave at once and whether it is necessary for him to be accompanied by Mr.Achar during the journey to Bangalore.

Sd. J.T.Edwards.
14/6/27.

Director:

Reference: Your enquiry regarding Dr.Parthasarathy's health.

Dr.Parthasarathy communicated the matter of his illness to me only about a week ago, since when he has been taking hospital medicines. From his history and symptoms I conclude that his complaint is of the nature of a hill-diarrhoea. He has apparently lost in health, and is evidently not keeping fit; but how much he has lost is difficult to say because he has not stayed with me in hospital so that I could keep a record of his weight and progress.

As for the urgency of his leaving Muktesar at once, I would not commit myself to any statement, unless I keep the gentleman in hospital under observation and watch the effects of a full course of treatment.

If he is going to Bangalore for a change of place, I have no objection.

He can try this place again when the rain season has established itself.

He wants a companion, if he goes; any intelligent

servant would do.

Your note is returned herewith.

Sd. S. L. Mittal

M.O.

14/6/27.

R. 18/7.

(5)

Muktesar.
15/9/27 ?

Dear Dr.Edwards,

I thank you very much for your very kind letter and concern about my health.

As per your desire I had postponed my journey till to-morrow so that you may decide whether Mr.Achar can accompany me. Unfortunately for Mr.Achar, he received a letter from his father with some news which had made him to leave Muktesar to-day. I think it is wise for me to accompany him to-day instead of going by myself to-morrow with my servant regarding whom the following incident will speak for itself. When we went to Bareilly the first day, my man who had gone out amarket--ting, missed way and reached close to the Juvenile Jail. He was put under lock-up as he was considered to be a suspect because he could not express himself being perfectly ignorant of any language but his own - Mallayalam. It was late in the night at ~~xxx~~ 11 O'clock when I went to the Police Station to lodge a complaint that my servant was missing I found out that he was under lock-up. Later I had to give a state--ment about his bona fides and get him released. Hence I sought the company of Mr.Achar, not as an intelligent servant of mine but as a good friend and son of a good and noble friend of mine.

Under these circumstances I am leaving Muktesar to-day.

Once more I thank you for all the kindnesses, courtesies and helps given to me by you.

I remain

Your very sincerely,

Sd. T.Parthasarathy.

R. 16/9.

(1)

S. D. Achar
Veterinary Surgeon.

Muktesar
P.O.Ritani.
15. VI. 1927.

To

The Director,
Imperial Institute of Veterinary Research,
Muktesar.

Sir,

I shall leave here for Mysore to-day in accordance with the oral permission kindly granted to me by you this morning, on account of the grave illness of my wife in Mysore, a report of which was shown to you by me. Very unfortunate as the incident is, it could easily have been still more so, had the sad news come to me before your "standardisation" tests were concluded.

Permit me to take t is opportunity to express my most sincere gratitude for the facilities you gave me both at Izatnagar and here for learning the mode of preparation of anti-rinderpest serum for which I was specially deputed. I have endeavoured to take full advantage of the kind opportunity and this, coupled with the intensive training I received in the Punjab Veterinary College prior to coming here, will, I hope, enable me to discharge intelligently my departmental duties and thus do justice to the practical and theoretical instructions I received here.

I request the favour of your directing any communica-tions you may have to make to me to the address given below.

Thanking you once again,

I remain,
Sir,
Yours sincerely,
Ad.S.D.Achar

Address:-

S.D.Achar
Son of Rao Bahadur M.C.Rangiengar Sahib
Advocate,
Mysore.

R.16/7.

Path:

(7)

We will now have to write a report to Govt. on the progress made by the two visitors, the steps we had taken for their instruction, and the reasons for their departure prior to the termination of the contemplated course.

I am passing these papers on to you, for report upon their work while they have been with you, as they have mostly been under you for practical instruction.

Reports will be called for also from Mr. Maddow and other officers under whom they have worked.

Mr. Ben has the previous papers concerning them, and subsequently a comprehensive report will be drawn up upon them, in the light of the programmes of study among his papers.

Sd. J.T.J.
15/6/27.

L. 16/7.

Director:

With reference to your note dated 15/6/27, I have not come much in contact with these two students during their visit to Muktesar, but the impressions which I have gathered from short periods of observation are :-

Dr. Parthasarathy. His knowledge and experience is entirely medical, and he did not seem to me to be very anxious to turn his attention to veterinary matters.

Mr. Achar. Appears anxious to learn but will require a long course of study before he can undertake serum production on his own responsibility.

Sd. J.R.Haddow.
16/6/27.

Director:

Reference P.U.D.

Dr. Parthasarathy worked in the pathological laboratory under me. His knowledge of general pathology was good but he had no knowledge of the pathology of animal diseases.

He was not keen on work in the post-mortem room and it was difficult to get him to handle post-mortem material himself.

Whilst under me he spent a good deal of his time in the library and did not seem to wish to gain any insight into the work of the laboratories here. It is realised that he was greatly handicapped by being a medical man but I think he might have done more to overcome this handicap.

Mr. Achar. Was a better man than the former in every way and had he had more training would have, I am sure, turned out very well. He had just started in the bacteriological laboratory but it was evident that he had a lot to learn there.

He showed willingness and keenness and had a fund of common sense. What he lacked in knowledge of pathology would

have been put right to some extent had he been able to prosecute his studies here please. 113

Sd. R.F.Stirling.
16/6/27.

R. 16/7.

Path:

I shall be much obliged to you of you will study this correspondence and give me an expression of your personal opinion concerning the views of the correspondent t at he anticipates no difficulty in the actual manufacture of serum in Mysore.

Sd. J. T. M.

5/7/27.

R.16/7.

(101)

DEPARTMENT OF AGRICULTURE,

MYSORE STATE.

D.O.No.25/c.

Office of the Director:
Camp, Mysore, June, 1927.

My dear Sir,

Since I addressed my last letter to you, making a request for your early visit to Bangalore, the Mysore Government have taken up the matter with the Government of India and two men, Dr. Parthasarathy and Mr. Achar were sent to your institute for studying the question of serum manufacture. I am now informed that Dr. Parthasarathy has returned to Bangalore owing to ill-health. I should esteem it a great favour if you would kindly let me have an expression of your opinion as to the work these two men have been doing and what you would propose for Mr. Achar to carry on while he remains at Muktesar. As I mentioned in my previous letter, I do not anticipate any difficulty in the actual manufacture of the serum here. But I would appreciate if these two officers or, in the event of Dr. Parthasarathy not returning, at least Mr. Achar be given a fair ~~xxxx~~ insight in the laboratory work of blending and standardising the brews. I have not seen Mr. Parthasarathy yet, but, do not wish the delay in writing to you until I return to Bangalore and shall therefore feel greatly obliged for your opinion on the above points.

Thanking you for the interest taken in our men both those lately sent and those that have been in the Institute for some time

I remain,

Yours sincerely,

Sd. G.H.Krumbiegel.

To

The Director,
Veterinary Research Institute,
Muktesar (U.P.).

(True copy).

Director.
15/7.

(11)

116

Director:

The letter under disposal from Mr. G.H.Krumbiegel, a Fellow of the Royal Horticultural Society, is extraordinarily difficult to comment upon. The statement of this gentleman "That I do not anticipate any difficulty in the actual manu-facture of the serum here", displays a scientific ignorance which would take years of instruction to dispel.

Prior to my arrival at Muktesar I had had a fair amount of experience in serum work, in both South Africa (1907-~~1907~~ 1910) and at Aldershot (Army Veterinary School, 1911). I must confess however that until I came to Muktesar I did not appreciate to the fullest extent the potential difficulty that may occur in the preparation of sera and the responsibility ~~xxxxxxxxxx~~ attachable to any guarantee given as to its potency.

As the result of my visit here I have come to the conclusion that it would require a year's close study on my part before I should become confident in this branch of Veterinary Science.

Sd. B.F.Stirling
Offg. Pathologist.
6/7/27.

2.16/7.

No. F.1658 & 11/8/27

1511/8/27 117

From

N. Rama Rao, Esq., B.A., B.L.,
Secretary to Govt., Dev. Deptts.

To

J.T.Edwards, Esq., D.Sc., (Lond.) M.R.C.V.S.,
Director, Imperial Institute of Veterinary Research.

F.V.95-25-13

Subject- Special training of Dr. P. Partha-sarathy and Mr. S.D.Achar in the methods of preparation of anti-rinderpest serum.

Sir,

I am directed to acknowledge the receipt of your letter No: 1511 dated the 18th July 1927 kindly furnishing detailed information regarding the work done by Dr. P.Parthasarathy and Mr. S.D. Achar who had been deputed by the Mysore Government to undergo a course of training in your Institute. Government regret that these officers did not avail themselves, as fully as they should have done, of the excellent opportunities your kindness afforded them of getting a thorough grounding in the methods of preparation of serum, and contemplate taking suitable notice of this disappointing conduct. I am to add,however,that Mr. S.D.Achar had real grounds of anxiety to return home.

Government fully realise the difficulties incidental to the manufacture of sera, and therefore greatly appreciate your assurance that the resources of your Institute will be available to the fullest degree to assist them in devising means for the successful combat of rinderpest. I am to add that it is in contemplation to send

send over to you for training two other officers who, it is ~~sincerely~~ hoped, will prove more satisfactory in every way than their predecessors. I shall address you further in this matter as early as possible.

I have &c.,

Secretary to Government,
Development Departments.

APP. F. VI. 61.]

SUBJECT.....

.....

.....

Section C - V.

File No. 915-25-

Serial No. 34

Diary No. of letter replied to .....

No.

General and Revenue Secretariat

( )

the *192*

To The Dir. of Agri.

Dear Sir,

Date of issue.....7.....

I am desired to request you to instruct the two officers deputed to U.K. this year for learning sericulture, not to submit their T.A. bills for journeys to & from Madras.

Signed by.....

Dr. P. Parthasarathy
M.R.S.D. Agri.

Yours Sincerely
Dir
22/8

List of enclosures.....

Copied by.....

Examined by .....

over

Proceedings of the Government of
H.H. the Maharaja of Mysore.

- - -

Read-

G.O.No: D.8279-81/C.V. 95-25, dated 13th March 1917 sanctioning the deputation of Messrs. P. Parthasarathi and S.D.Achar to Muktesar for learning the methods of manufacture of sera for rinderpest and other diseases.

2. Correspondence ending with letter No: R.O.C. 1576/25-26 dated July 1917 from the Director of Agriculture forwarding for sanction a detailed estimate for Rs.31,853 for the manufacture of serum on an experimental scale.

...

Order No. -35

Dated Bangalore, ~~August~~ Sept. 1927.

Government are of opinion that sufficient knowledge and experience have now been obtained to justify the commencement of operations for the manufacture of sera for combating rinderpest. But they think that the work might, for the present, be started on an experimental scale, provision being made, however, for ~~ultimate~~ expansion if the results prove satisfactory. They are accordingly pleased to sanction the proposals received from the Director of Agriculture as subsequently modified in consultation with him. The details involving a cost of Rs. 32,165 including the pay of Dr P. from the date of his during the next 3 months are given in the

the Appendix.

2. The production of serum will be taken up in the Virus Depot and will be attended to along with virus production so that the two connected operations might be co-ordinated and have the advantage of common supervision and control.

3. Dr. P.Parthasarathy will be placed in charge of serum manufacture and will be regarded as under deputation in the Agricultural Department from the date on which he was deputed for training at Muktesar and he will be seconded in the Public Health Department. The manufacture of serum will constitute a section of the Civil Veterinary Department under the direct control of the Director of Agriculture. The present staff working in the Virus Depot will work in the Serum Section under Dr. Parthasarathy. Mr. S.D.Achar will continue to be attached to the Virus Depot and will work in subordination to Dr. Parthasarathy, and the two Veterinary Inspectors now on deputation at Mukteshar will, on completion of their training, be also posted for duty in this section.

4. A demand for an additional grant of Rs. 32,285/- will be placed before the Legislative Council at its next session.

5. As it is essential that action should be taken without any loss of time, the Comptroller is requested to pass expenditure in accordance with the estimates sanctioned in this order on

on bills countersigned by the Director of Agriculture.

6. The Director of Agriculture is requested to take immediate steps to organise work in this section, and to see that accurate records are maintained such as would serve to give a correct idea of methods, cost, quantities and grades of sera, inoculations, and results. He is also requested to submit at the end of three months, a comprehensive report containing detailed information calculated to enable Government to form a just appreciation of the result of the operations, and to arrive at a decision about future developments.

7/8/23

6827

Secretary to Government,
Development Departments.

To

The Director of Agriculture in Mysore,
" Comptroller to Govt. through Fl Sectt. with the estimate.
" Senior Surgeon and Sanitary Commissioner.

Copy to G.M.Branch.

Appendix.

Estimate for the probable cost of producing serum as an experimental measure.

REQUIREMENTS FOR THREE MONTHS.

S.No.	Particulars.		Amount.	Remarks.
1.	Temporary sheds.	3.	Rs.1800	
	Throwing shed.	1	1000	
	Repairs for the main building ...		1500	
			Rs.4300	
2.	Staff.			4 months
	Dr. P.Parthasarathy.	Rs.400/ p.m	Rs.~~1200~~	includes pay from the date of deputation vis. 18/4/27.
	Veterinary Inspector.	1 at Rs.100 + 20	360	
	do	1 at Rs. 75/-	225	
	Accounts Clerk	1 at Rs. 50/-	150	
	Salustries.	2 at Rs.25/-each.	150	
	Peons.	2 at Rs.13/- "	78	
	Coolies.	10 at Rs.13/- "	~~400~~ 390	
		Total.	Rs.~~2563/-~~ 4153/-	
3	Animals.	150	4500	
	Feeding		4500	
		Total.	Rs.9000	
4.	Miscellaneous requirements.			
	Bacteriological apparatus.		2000	
	Bottles.		1500	
	Glassware.		500	
	Chemicals.		500	
	Contingencies.		1500	
	Reservoirs.	2	400	
	Alluminium vessels.		300	
	Enamell bucketts.	1 doz.	100	
		Total.	Rs6800.	
5.	Virus production.	...	8000	
		Grand Total.	Rs.~~30,663/-~~ = 32,253/-	

124

Government of His Highness the Maharaja of Mysore.

P.B. No. 36

13-7-1

GENERAL AND REVENUE DEPARTMENTS

G. O. No. D. 2623-5 | C.V. 95-25-35 DATED 13th Sept. 1927.

May this be

i. printed? — yes.

ii. treated as a standing order?

iii. published in the Gazette English Part?

iv. translated?

v. placed at the disposal of the press?

vi. published in the Gazette Kannada Part?

} for orders. NO

manufacture of Serum

Sanctions the estimates for the — and an experimental measure.

1449

125

Government of His Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. D. 2623-5—C. V. 95-25-35, dated 13th September 1927.

Manufacture of Serum.

Sanctions the estimates for the —— as an experimental measure.

READ—

Government Order No. D. 8279-81—C. V. 95-25-13, dated 28th March 1927, sanctioning the deputation of Messrs. P. Parthasarathi and S. D. Achar to Muktesar for learning the methods of manufacture of Sera for rinderpest and other diseases.

2. Correspondence ending with letter No. Roc. 1576—25-26, July 1927, from the Director of Agriculture, forwarding for sanction a detailed estimate for Rs. 31,853 for the manufacture of serum on an experimental scale.

ORDER No. D. 2623-5—C. V. 95-25-35, DATED 13TH SEPTEMBER 1927.

Government are of opinion that sufficient knowledge and experience have now been obtained to justify the commencement of operations for the manufacture of Sera for combating rinderpest. But they think that the work might, for the present, be started on an experimental scale, provision being made, however, for expansion if the results prove satisfactory. They are accordingly pleased to sanction the proposals received from the Director of Agriculture as subsequently modified in consultation with him. The details involving a cost of Rs. 32,253 during the next three months including the pay of Dr. Parthasarathi from the date of his deputation are given in the Appendix.

2. The production of Serum will be taken up in the Virus Depot and will be attended to along with virus production so that the two connected operations might be co-ordinated and have the advantage of a common supervision and control.

3. Dr. P. Parthasarathi will be placed in charge of Serum manufacture and will be regarded as under deputation in the Agricultural Department from the date on which he was deputed for training at Muktesar and he will be seconded in the Public Health Department. The manufacture of Serum will constitute a section of the Civil Veterinary Department under the direct control of the Director of Agriculture. The present staff working in the Virus Depot will work in the Serum Section under Dr. Parthasarathi. Mr. S. D. Achar will continue to be attached to the Virus Depot and will work in subordination to Dr. Parthasarathi, and the two Veterinary Inspectors now on deputation at Muktesar will, on completion of their training, be also posted for duty in this Section.

4. A demand for an additional grant of Rs. 32,253 will be placed before the Legislative Council at its next Session.

5. As it is essential that action should be taken without any loss of time, the Comptroller is requested to pass expenditure in accordance with the estimates sanctioned in this order on bills countersigned by the Director of Agriculture.

6. The Director of Agriculture is requested to take immediate steps to organise work in this section, and to see that accurate records are maintained such as would serve to give a correct idea of methods, cost, quantities and grades of Sera, inoculations and results. He is also requested to submit at the end of three months, a comprehensive report containing detailed information calculated to enable Government to form a just appreciation of the result of the operations, and to arrive at a decision about future developments.

N. RAMA RAO,
Secretary to Government,
Development Departments.

To—The Director of Agriculture in Mysore.
The Comptroller to Government, through Financial Secretariat with the estimate.
The Senior Surgeon and Sanitary Commissioner to Mysore.

Exd.—P. S. R. N.

No. D. 2623-5—C. V. 95-25-3[illegible], DATED 13TH SEPTEMBER 1927.

APPENDIX.

Estimate for the probable cost of producing Serum as an experimental measure.

Particulars	Amount		Remarks
	Rs.		
1. Requirements for three months.—			
Temporary sheds 3	1,800		
Throwing shed 1	1,000		
Repairs for the main building	1,500		
	———	4,300	
2. Staff.—			
Dr. P. Parthasarathi Rs. 400 per mensem ..	*2,800		*Includes four months' pay from the date of deputation, *viz.*, 18th April 1927.
Veterinary Inspector 1 at Rs. 100+20 per mensem ..	360		
Do 1 at Rs. 75	225		
Accounts Clerk 1 at Rs. 50	150		
Salustries 2 at Rs. 25 each	150		
Peons 2 at Rs. 13 each	78		
Coolies 10 at Rs. 13 each	390		
	———	4,153	
3. Animals 150	4,500		
Feeding	4,500		
	———	9,000	
4. Miscellaneous requirements.—			
Bacteriological Apparatus	2,000		
Bottles	1,500		
Glassware	500		
Chemicals	500		
Contingencies	1,500		
Reservoirs 2	400		
Aluminium vessels	200		
Enamel buckets 1 dozen	100		
	———	6,800	
5. Virus production		8,000	
Grand Total ..		32,253	

W D 638—GPB—880—28-9-27

APP. F. VI. Gl.]

SUBJECT.....

.....

.....

Diary No. of letter replied to .....

General and Revenue Secretariat
( )
the 192

Date of issue.....

Signed by.....

List of enclosures.....

Copied by.....

Examined by .....

complete ... l
... dfls

Section C.V.
File No. 95-25
Serial No. 36

No.

To The comptr.

Dear Sir,

I am desired to forward and I ... for inf^n copy of my D... Letter No. D 210 ... V. 95 ... -36 dt 25/8/27 to the Dir of Agr Mysore.

Yours Sincerely
for Secy
23/9

K.No. 23/9/27

over

APP. F. VI. 61.]

SUBJECT.....

.....

.....

Diary No. of letter replied to .....

General and Revenue Secretariat

( )

the 192

Date of issue.....

Signed by.....

List of enclosures.....

Copied by.....

Examined by .....

Section C.V.

File No. 95-25

Serial No. 37

No. D 8231

To The Comptr.

Dear Sir, I am desired to request you to refer for ~~obtained~~ the orders of Govt ~~before~~ the grant of the next increment due to Dr. P. Seetha Ramaiah of the Public Health Dept (now under deputation in the Agri Dept). ~~is granted as usual~~

Yours Sincerely

WD 0562 GPB—31,000—17-8-25

23/9/27 copy to the C.B.

129

14 10 27

D. O. No. 159/GAD

GOVERNMENT OF MYSORE

GEN. & REV. SECRETARIAT
14 OCT. 1927
DEVELOPMENT BRANCH.

OFFICE OF THE COMPTROLLER TO THE GOVERNMENT OF MYSORE.

Bangalore, dated 12th Oct. 1927.

C.V. 95-25-38

Dear Sir,

I write to acknowledge receipt of your D.O. letter No.D.3335/C.V.95-25-37 dated 29th September 1927, in connection with the grant of next increment to Dr. P. Parthasarathy and to note the contents thereof.

Yours sincerely,

V. Srinivasan

N. Rama Rao Esq., B.A., B.L.,
Secretary to the Government of Mysore,
Development Departments, Bangalore.

CV 413/10

Apr

Telegraphic Address "Agri., Bangalore."
Code-5th Edition A.B.C.

Urgent.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

In reply please quote in full the Nos. and indicative symbol given below.

Bangalore,

11th April 1927 192

No.Roc.1576/Hc.462 of 25-26.

6746

FROM

G. H. KRUMBIEGEL, Esq., F.R.H.S.,
Offg. *Director of Agriculture in Mysore,*
Bangalore.

To

N. Rama Rao, Esq.,B.A.,B.L.,
Secretary to Government of Mysore,
Development Departments,
Bangalore.

F.C. 95-25-16

SIR,

With reference to Government Order No.D.8279-81/C.V.95-25-13 dated 28th March 1927, sanctioning the deputation of ---- Messrs.P.Parthasarathy and S.D.Achar to Muktesar for learning the methods of manufacture of Sera for rinderpest and other diseases, I have the honour to request you to kindly let me have for reference copies of all the correspondence if any from the Government of India that has been received in the Secretariat in this connection.

I have the honour to be,
Sir,
Your most obedient servant,

NVS.

Offg. Director of Agriculture.

~~The Dir's request throws additional work on the typists of the Branch, who are already heavily worked.~~ Wherever necessary, copies of letters are being sent to the Dir and there seems

NOTE—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat.

6746

C. V. File No. 95 of 1926

131

Serial No.

to be no need to send copies of all correspondence in the matter. Some of the letters are personal. Submd for orders. 14/4/27. (The main file is separately Submd).

I agree. Subd for orders

(Sd) D) 19/4

Please let me have a look at the file to see whether there are any papers which would be of use to the Dir.

28/4/27

The C.V. file 95 [x] 25 is herewith linked for personal & orders

5/5/27. Sd D.) 5/5

I don't think that any of the correspondence would be of use to the Director. It mostly consists of letters & telegrams of a personal nature between the Dewan & Mr Blunt.

The file has the subd of H.H. It is a point for orders whether after it is rec'd back, it may be unofficially sent

x will be detached before being sent to the Dewan's office. HHH.

NOTE—Contn. sheet

GPB—5,000—30-3-27

App. F. III—2]

General and Revenue Secretariat.

C·V· File No. 9 5 of 1926

Serial No.

OFFICE OF THE THIRD CLERK OF COUNCIL
9 MAY 1927
No. 1246

File sent U.O. on 8/6/27

8/6/27

to the Dir. for taking copies of such papers as he thinks useful. I, personally, think it unnecessary.
The file in question is linked. Hence may be kept up for further action.
3d Member)

9/5/27

maybe sent. The Dr may be asked to treat the personal correspondence as conducted only on his information—

9/5

The linked file may now be sent to the Dewan.

9/5/27

10/5

NOTE—Contn. sheet

GPB—5,000—30-3-27

133

2nd July 1927.

DO 4 4

My dear Mr Bhore

Many thanks for your letter dated the 15th June and the copy of the letter from Mr.Edwards accompanying it. It makes interesting reading and the course of instruction outlined seems admirably suited to turn out men competent to take up practical work. I hope our men were found apt pupils, and that they have profited from the opportunities which were so kindly afforded them.

Yrs Sd M S

J. W. Bhore, Esq., C.I.E., C.B.E.,
Secretary to Government,
Departments of Education,
Health and Lands,
Simla.

220.

D.O. issued from Dewan's office

Please place in file

5/7/27

777

DEWAN OF MYSORE

134

LAKE VIEW,

MYSORE.

24th June 1927.

My thanks

~~Thank you~~ for your letter dated the 15th instant and the copy of the letter from Mr. Edwards ~~which you so kindly sent me.~~ accompanying it It makes interesting reading and the course of instruction outlined seems admirably suited to turn out men competent to take up practical work. I hope our men were found apt pupils, and that they have profited from the opportunities which were so kindly afforded them.

Mr. is Mr. some body in Hydari's office who I can make out to be

M.S.A. Hydari Esq., I.C.S.,
Under Secretary to the Government of India,
Department of Education,
Health and Lands,
S I M L A.

It is probably Sri Habibullah. Private Secy. to Sir Shah Nawaz

135

24th June 19

Thank you for your letter dated the 15th instant, and the copy of the letter from Mr. Edwards which you so kindly sent me. It makes interesting reading and the course of instruction outlined seems admirably suited to turn out men competent to take up practical work. I hope our men were found apt pupils, and that they have profited from the opportunities which were so kindly afforded them.

M.S.A. Hydari Esq., I.C.S.,
Under Secretary to the Government of India,
Department of Education,
Health and Lands,
S I M L A.

Needs attn. for signature

Looks like "Reis"

I have not been able to locate any reference to this appointment in the Directors and I don't know who this person is. The letter may perhaps be addressed to the Education Member

App.F:VI G1,J

126

B650

SUBJECT .....

Please refer
to Secretary
for signature

24/6/27

Diary No. of letter replied to .....

Section

File No.

Serial No.

No.

To .....

General and Revenue Secretariat

( )

, *the* *192*

Date of issue .....

Signed by .....

List of enclosures .....

Copied by .....

Examined by .....

Thank you for yr letter dated the 15th inst and the copy of the letter from Mr Edwards which you so kindly sent me. It makes interesting reading and the course of instruction outlined seems admirably suited to turn out men competent to take up practical work. I hope our men were found apt pupils, and that they have profited from the opportunities which were so kindly afforded them.

over

...N'S C...
Received 24 JUN. 1927
EDUCATION, HEALTH & LANDS DEPARTMENT, GOVERNMENT OF INDIA.

D.O.No. ...-Agri.

No. 1116 Simla, the June, 1927.

Dear Mr. Mirza Ismail,

In connection with the deputation of two Mysore officers for training at Muktesar, I send for your information a copy of a letter received from Dr. Edwards, Director of the Institute, in reply to a letter from us asking for a copy of the study programme arranged for these officers. You will probably find the letter interesting.

Yours sincerely.

Amin-ul-Mulk Mirza
M. Ismail, C.I.E., O.B.E.,
Dewan of Mysore,
Bangalore.

24-6-27

Copy of a demi-official letter No.878, dated the 1st June 1927, from Dr. J. T. Edwards, M.R.C.V.S., Director, Imperial Institute of Veterinary Research, Muktesar, to M.S.A. Hydari, Esq., I.C.S., Under Secretary to the Government of India, Department of Education, Health & Lands.

I duly received your D.O. No.934-Agri. of the 5th May 1927.

I am forwarding to you a copy of a circular order wherein I had outlined, prior to the arrival of the students, the courses of training to be held at Muktesar this year. As you will notice, the system of training formulated is designed also to improve the knowledge of the existing tehhnical members (Veterinary Inspectors) of the staff, some of whom have been recruited very recently, and other visiting officers.

A special feature of the programme is the institution of a system of short addresses on current veterinary literature, to be given in rotation by the officers under training. It is believed that such a system will conduce to the development of an "atmosphere" amongst these officers by stimulating healthy discussions upon veterinary subjects of topical interest.

The course of instruction for the two Mysore Officers has been drawn up with due regard to their special requirements. As will be seen from the report upon the progress made by them in practical work during the past week, they have already had valuable opportunities of making first-hand observations on the current problems of rinderpest investigation in the Institute. The course is moreover unique in that it affords them unrivalled opportunities of observing all the various practical procedures in which they must attain a high degree of competence in undertaking the duties of serum manufacture. At the same time, it has been deemed essential that they should be taken through a concurrent brief course of general instruction in the rudiments of general animal pathology so that they may be mentally equipped to grasp adequately the significance of the technical methods which it is their special object to learn.

The programme of study is an elastic one, that can be

accommodated readily to the natural abilities of the students.

It is proposed to communicate to you officially later a full account of the progress made by the two visitors.

SN3.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

139

D.O. No. 187/29

G. H. KRUMBIEGEL, Esq., F.R.H.S.,
Offg. Director.

OFFICE OF THE DIRECTOR.

Bangalore, Sept. 2, 27 *192*

My dear Balasundaram,

I have your letter with enclosed note regarding the question of control in our proposed Serum Manufacture.

I am fully aware that careful examinations both while blending the brews as also of the standardised serum prior to issue are essential and that was the reason I agreed to associate a medical man with bacteriological qualifications with our staff. Though the men sent did not, as you know, come away with Mr. Edwards' approval, yet from the experience we have gained in the manufacture of Virus I am confident that Serum Manufacture also will succeed.

The cost to us will not be anything to what Mukhtesar seems and I have already said that we shall produce at 1/3 the price we now pay for Mukhtesar Serum. In Mukhtesar they supply serum of various potencies. The first bleeding of the animal is taken 10 days after injecting it with Rinderpest. The first bleeding gives a brew of the highest potency. Four more bleedings are taken at 10 days interval and the potency of each succeeding brew diminishes. Now I intend to take only one bleeding from each animal. Thereby we shall avoid mixing low potency brews and only obtain serum of the highest potency. Notwithstanding this, our estimated cost is 1/3 of present expenses for an equal quantity. During the experimental stage, moreover, all animals are stallfed throughout, while later on we shall be able to graze a large number outside thus reducing cost still further.

Now as to control. Every precaution is taken to

examine the animals before injection, study their reaction, and again microsplically examining the brews during standardising and again before bottling. Each brew is again tested on 9 animals(3 each for different strength of doses) and again a preservative is added during sterilisation which makes it practically impossible for any foreign germs to enter subsequently. I am satisfied that we are using all the precautions that can be used at Mukhtesar and that strict handling of the serum in all stages will be observed.

There is really very little difference in the handling (so far as control and precaution is concerned) of serum and virus, and our success in the preparation and handling of virus fully justifies our attempt to produce and handle serum as well.

C.S. Balasundaram Iyer, Esq., B.A.,
Member of Council, Bangalore.

(111)

30th August 1927.

My dear Mr. Krumbiegel,

I send herewith a note re Serum Manufacture in Mysore. The points raised therein require scrutiny. I shall be obliged if you will kindly send me a detailed note on the several aspects of the question mentioned in it.

Yours sincerely,

Sd. C.S. Balasundaram Iyer.

OFFICE OF THE
THIRD MEMBER OF COUNCIL.
1 SEP 1927
No.....

Type this

My dear Sir Charles,

I have received your D.O. letter No.49 dated the 26th August 1927 regarding the manufacture of sera.

There is no doubt that great care is necessary in blending brews and standardising serum before issue; and that is why a medical man with Bacteriological qualifications is - proposed to be associated with the Veterinary staff. It is true that our men returned from Muktesar before undergoing the full course outlined by the Director of the Institute; but they are not altogether new to the work, and it is hoped that with the experience that the Department has gained in the manufacture of virus, the preparation of serum also can be successfully undertaken.

The object of manufacturing serum - locally is, as you say, to save expense. The cost of manufacture here will be nowhere near what it is at Muktesar, and it is hoped that we shall be able to produce our own serum at about a third of the price we now pay for serum that we get from Muktesar. Our serum will also be of a higher potency. Without going into technical details, it may be stated broadly that the serum got from Muktesar is a blend of four brews prepared from blood obtained from treated animals (6) four successive bleedings made at intervals of ten days. The brews obtained are in the decreasing order of -

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potency. Here, it is intended to bleed our animals only once so that the brew got will be of maximum potency. Our cost of production will be ~~therefore~~ further reduced as operations progress, by making satisfactory grazing arrangements for our cattle instead of resorting to stall-feeding.

Our scheme of work fully recognises the importance of control, and the appalling consequences of any defect in this part of the operations. The staff entrusted with the work is familiar with the precautions usually taken in the manufacture of virus, and they are competent to secure scientific accuracy in their results.. What is proposed to be done is to examine the animals before injection, to study the re-action after injection, to microscopically examine the brews during standardisation and again before bottling for issue. Our brew before it is issued will be tested on nine animals in graduated doses, and a preservative will be added during sterilisation which precludes all possibility of injurious germs getting in subsequently. In short, all precautionary measures now being taken at Muktesar will be adopted here also. I send you the confidential reports of the authorities at Muktesar on the work of our officers who were sent there for study. It represents one side of the question rather strongly, and I might add it has been fully examined in detail and carefully considered before the present proposals were formulated.

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Steps are also being taken to depute 2 more officers – one a medical man who has specialised in Bacteriology & the other a vet officer – to go through a full course at Muktesar, & that the experimental preparation of serum as proposed need not wait for the training of these.

It is very necessary for the vigorous conduct of cattle precaution operations on an adequate scale that we should produce our own serum without loss of time, and ~~I request you the favour~~ of your submitting ~~the file~~ for His Highness' ~~order~~ at ~~an early~~ date.

Yours sincerely,

(D e w a n)

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